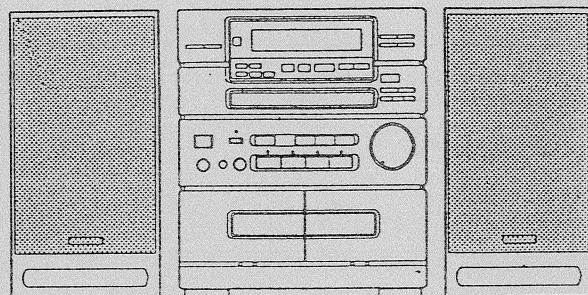


aiwa

NSX-350M NSX-351M NSX-352M

SERVICE MANUAL



STEREO CASSETTE RECIVER

• BASIC TAPE MECHANISM : 1ZM - 7

• TYPE. NSX - 350M (LH, HE, U, E, K, Z)
NSX - 351M (U) NSX - 352M (U)

SYSTEM	CASSIVER	REMOTE CONTROLLER	SPEAKER	COMPACT DISC
NSX - 350M	CX - N350M	RC - TN350M	SX - N350M	※ DX - N350M
NSX - 351M	CX - N351M	RC - TN351M	SX - N351M	※ DX - N351M
NSX - 352M	CX - N352M	RC - TN352M	SX - N352M	※ DX - N352M

※ As to the service information of DX - N350M, DX - N351M, DX - N352M
see the individual service manual of DX - N350M, DX - N351M, DX - N352M.

※ There is electrical difference depending on colors (gold and white).

AIWA CO., LTD.

Tokyo Japan

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SPECIFICATIONS

<FM section>		
Frequency range	: 87.5MHz to 108MHz	
Usable sensitivity(IHF)	: LH, HE, U : 1.3 μ V (75ohms) 13.2dBf E, K : 2.0 μ V (75ohms) 18dBf Z : 5.5 μ V (75ohms) 13dBf	
Alternate channel selectivity	: 50dB ($\pm$ 400kHz)	
Signal-to-noise ratio	: Except Z : 70dB (STEREO), 76dB (MONO) Z : 65dB (STEREO), 73dB (MONO)	
Harmonic distortion	: 0.3% (MONO), 1kHz 0.5% (STEREO, L-R), 1kHz	
Frequency response	: Z : 30Hz to 15kHz (+ 0.5dB, - 3dB)	
Stereo separation	: Except Z : 33dB at 1kHz Z : 30dB	
Antenna	: 75ohms (unbalanced)	
<AM(MW)section>		
Frequency range	: HE, E, K, Z : AM531 (530) kHz to 1,602 (1,710) kHz LH, U : AM530 (531) kHz to 1,710 (1,602) kHz	
Usable sensitivity	: 350 μ V/m	
Selectivity	: 22dB (9kHz)	
Signal-to-noise ratio	: 53dB (100dB input)	
Antennas	: Loop antenna	
<LW section> (E, K, Z)		
Frequency range	: 144kHz to 290kHz	
Sensitivity	: 1,400 μ V/m	
Antenna	: Antenna code	
<Timer section>		
Program timer	: On-timer, capable of free setting	
Sleep timer	: Capable of setting in 10-minute increments, 120minutes maximum	
<Amplifier section>		
Power output	: LH, HE : 40W + 40W (6ohms, T.H.D 10% 1kHz) E, K, Z : 30W + 30W (6ohms, T.H.D 1% 1kHz) FTC RULE (U model only) 30 watts per channel, Min. RMS at 6ohms, from 50Hz to 20kHz, with no more than 1% Total Harmonic Distortion	
Harmonic distortion	: 0.05% (15W, 1kHz, 6ohms)	
Input sensitivity	: VIDEO/AUX : 150mV (adjustable)	
<Cassette deck section>		
Track format	: 4 tracks, 2 channels	
Frequency response	: CrO ₂ tape : 50 - 16,000Hz Normal tape : 50 - 15,000Hz	
Signal-to-noise ratio	: 60dB (DOLBY NR ON, CrO ₂ tape peak level)	
Tape speed	: 4.8cm/sec.(1 7/8 ips) 9.5cm/sec.(double speed)	
Recording system	: AC bias	
Erase system	: AC erase	
Motor	: DC servomotor $\times$ 1	
Heads	: Playback head $\times$ 1 (deck 1) Recording/playback/erasure head $\times$ 1 (deck 2)	
<Speaker SX - N350M, SX - N351M, SX - N352M>		
Cabinet type	: 3way, bass reflex (Magnetism sealed type)	
Speaker	: 130mm (5 1/8 in) cone type woofer 50mm (2in) cone type tweeter 20mm (1 1/16 in) ceramic type super tweeter	
Impedance	: 6ohms	
Music power	: 40W	
Output sound pressure level	: 87dB/W/m	
Dimensions(W $\times$ H $\times$ D)	: 200 $\times$ 392 $\times$ 200mm (7 7/8 $\times$ 15 1/2 $\times$ 7 7/8 in)	
Weight	: 3.3kg (7.3lbs.)	
<General>		
Power requirements	: LH, HE : AC 120V/220V/240V, switchable 50/60Hz E, Z : AC 230V, 50Hz K : AC 240V, 50/60Hz U : AC 120/220V-240V, switchable, 50/60Hz	
Power consumption	: LH, HE : 95W (System total 105W) U : 85W (System total 100W) E, Z : 205W (System total 215W) K : 215W (System total 225W)	
Dimensions(W $\times$ H $\times$ D)	: Center unit : 260 $\times$ 302.5 $\times$ 329.5 mm (10 1/4 $\times$ 12 $\times$ 13in.) System : 660 $\times$ 392 $\times$ 329.5 mm (26 $\times$ 15 1/2 $\times$ 13in.)	
Weight	: Center unit : 7.2kg (15.8lbs.) System : 13.8kg (30.4lbs.)	

- Design and specifications are subject to change without notice.
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- The word "BBE" and the "BBE symbol" are trademarks of BBE Sound, Inc.

■ ACCESSORIES/PACKAGE LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q,TY
	1	★82-NK4-901-119	INSTRUCTION BOOKLET, U (N351M, N352M)		
	1	★82-NK4-901-019	INSTRUCTION BOOKLET, U (HE, LH, U)	※	1
	2	★82-NK4-902-018	INSTRUCTION BOOKLET, E (E, K, Z)	※	1
	3	★82-NK4-638-019	RC, RC-TN350M	※	1
	4	★87-006-225-019	AM LOOP ANT NC2 (HE, LH, U, Z)		1
	5	★87-006-226-010	AM LOOP ANT CON2 (E, K)		1
	6	★87-042-062-019	PLUG, ADAPTER S-16115 (HE)		1
	7	★87-032-845-019	PLUG, CONVERSION (LH)		1
	8	★87-043-106-019	FM, WIRE ANT (Z)		1
	9	★82-NK4-612-019	RC, RC - TN351M (N)		1
	9	★82-NK4-635-019	RC, RC - TN352M (W)		1

ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	DESCRIPTION
===IC===		
87-001-440-010	IC, BA15218N	
87-002-637-010	IC, BU4051B	
87-002-247-010	IC, BU4052B	
87-002-282-010	IC, BU4066B	
87-002-444-010	IC, BU4094B	
87-001-874-010	IC, HA12134A	
87-001-942-010	IC, LA1265(S)	
87-001-334-010	IC, L89051A	
82-NK4-630-010	IC, LC67216A-4950	
87-002-607-010	IC, LM7001	
87-027-735-010	IC, MM-3102(HE)	
87-027-736-010	IC, MM-3207(HE)	
87-027-895-010	IC, MS218AL	
87-020-758-010	IC, NJM2068SD	
87-001-790-010	IC, SBX1610-52(REMOTE SENSOR)	
87-020-966-010	IC, STK4142-MK2	
87-020-446-010	IC, TA7343AP	
87-027-827-010	IC, TC4069UBP	
87-002-218-010	IC, XRC5451AP	
===TRANSISTOR===		
89-501-615-010	FET, 2SK161GR	
89-502-415-010	FET, 2SK241GR	
89-502-466-010	FET, 2SK246BL	
89-502-464-010	FET, 2SK246Y	
89-110-155-010	TRANSISTOR, 2SA1015GR	
89-112-965-010	TRANSISTOR, 2SA1296GR	
89-113-187-810	TRANSISTOR, 2SA1318TU	
87-026-463-010	TRANSISTOR, 2SA933S	
89-109-521-010	TRANSISTOR, 2SA952K	
89-213-702-010	TRANSISTOR, 2SB1370E	
87-026-462-010	TRANSISTOR, 2SC1740S	
89-318-155-010	TRANSISTOR, 2SC1815GR	
89-318-154-010	TRANSISTOR, 2SC1815Y	
89-319-233-010	TRANSISTOR, 2SC1923	
89-320-011-010	TRANSISTOR, 2SC2001K	
89-332-665-010	TRANSISTOR, 2SC3266GR	
89-333-317-810	TRANSISTOR, 2SC3331	
89-406-555-010	TRANSISTOR, 2SD655E	
87-026-269-010	TRANSISTOR, DTA114ES	
87-026-214-010	TRANSISTOR, DTA114YS	
87-026-219-010	TRANSISTOR, DTA144ES	
87-026-292-010	TRANSISTOR, DTA144WS	
87-026-245-010	TRANSISTOR, DTC114ES	
87-026-215-010	TRANSISTOR, DTC114YS	
87-026-289-010	TRANSISTOR, DTC143KS	
87-026-218-010	TRANSISTOR, DTC144ES	
87-026-293-010	TRANSISTOR, DTC144WS	
87-026-515-019	TRANSISTOR, DTD123YS	
===DIODE===		
87-001-574-010	DIODE, 1SR139	
87-002-843-019	DIODE, 1SS108	
87-001-559-010	DIODE, 1SS131	
87-020-691-010	DIODE, 1SS132	
87-002-225-010	DIODE, 40C-K10	
87-001-820-019	DIODE, 6P15B(F)	
87-002-608-010	DIODE, DSF10TC	
87-002-743-010	DIODE, ZENER MTJ33B	
87-001-916-010	DIODE, ZENER UTZJ10B	
87-001-911-010	DIODE, ZENER UTZJ4.7A	
87-001-913-010	DIODE, ZENER UTZJ5.6B	
87-001-914-010	DIODE, ZENER UTZJ6.2B	
87-001-915-010	DIODE, ZENER UTZJ6.8A	
87-002-430-010	DIODE, ZENER UTZJ8.2C	

REF. NO.	PART NO.	DESCRIPTION
===MAIN CIRCUIT BOARD SECTION===		
BPF731	★82-794-697-010	FILTER, ANTI BIRDIE(Z)
BPF831	★87-030-105-010	FILTER, BPM6A(Z)
C101	★87-010-399-090	CAP, ELECT 3300-42 HI-R
C102	★87-010-399-090	CAP, ELECT 3300-42 HI-R
C103	★87-010-390-090	CAP, ELECT 3300-25 SME
C104	★87-010-237-019	CAP, ELECT 1000-16
C105	★87-010-101-010	CAP, ELECT 220-16 SME
C106	★87-010-764-010	CAP, ELECT 47-63
C107	★87-010-384-010	CAP, ELECT 100-25 SME
C108	★87-010-260-010	CAP, ELECT 47-25 (EXCEPT U)
C108	★87-010-384-010	CAP, ELECT 100-25 SME(U)
C109	★87-010-263-010	CAP, ELECT 100-10
C110	★87-010-263-010	CAP, ELECT 100-10
C111	★87-010-370-010	CAP, ELECT 330-6.3 SME
C112	★87-010-237-019	CAP, ELECT 1000-16
C113	★87-010-403-010	CAP, ELECT 3.3-50 SME
C114	★87-018-205-010	CAP, CERA-SOL SS 0.022-25 F
C115	★87-018-208-010	CAP, CERA-SOL SS 0.047-50 F(Z)
C116	★87-018-127-010	CAP, CERA-SOL SS 470P-50 B
C117	★87-010-405-010	CAP, ELECT 10-50 SME(HE, LH, U)
C117	★87-016-145-019	CAP, ELECT 10-50 KME(E, K, Z)
C118	★87-018-208-010	CAP, CERA-SOL SS 0.047-50 F(Z)
C121	★87-018-214-010	CAP, CERA-SOL SS 0.1-50(Z)
C122	★87-018-214-010	CAP, CERA-SOL SS 0.1-50(Z)
C203	★87-018-205-010	CAP, CERA-SOL SS 0.022-25 F(Z)
C205	★87-016-073-010	CAP, ELECT 1-50 FX
C206	★87-016-073-010	CAP, ELECT 1-50 FX
C207	★87-010-401-019	CAP, ELECT 1-50 SME
C208	★87-010-401-019	CAP, ELECT 1-50 SME
C209	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C210	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C211	★87-010-401-010	CAP, ELECT 1-50 SME
C212	★87-010-401-010	CAP, ELECT 1-50 SME
C213	★87-010-402-010	CAP, ELECT 2.2-50 SME
C214	★87-010-402-010	CAP, ELECT 2.2-50 SME
C215	★87-018-131-010	CAP, CERA-SOL SS 1000P-50 B
C216	★87-018-131-010	CAP, CERA-SOL SS 1000P-50 B
C217	★87-010-401-010	CAP, ELECT 1-50 SME
C218	★87-010-401-010	CAP, ELECT 1-50 SME
C221	★87-010-400-010	CAP, ELECT 0.47-50 SME(EXCEPT U)
C222	★87-010-400-010	CAP, ELECT 0.47-50 SME(EXCEPT U)
C223	★87-010-260-010	CAP, ELECT 47-25 SME
C224	★87-010-260-010	CAP, ELECT 47-25 SME
C225	★87-010-260-019	CAP, ELECT 47-25 SME(HE, LH, U)
C225	★87-016-130-019	CAP, ELECT 47-25 KME(E, K, Z)
C226	★87-010-260-019	CAP, ELECT 47-25 SME(HE, LH, U)
C226	★87-016-130-019	CAP, ELECT 47-25 KME(E, K, Z)
C227	★87-018-214-010	CAP, CERA-SOL SS 0.1-50 F
C228	★87-018-214-010	CAP, CERA-SOL SS 0.1-50 F
C233	★87-010-546-010	CAP, ELECT 0.33-50 SME
C234	★87-010-263-010	CAP, ELECT 100-10 SME
C234	★87-016-123-018	CAP, ELECT 100-10KME(E, K, Z)
C235	★87-010-260-010	CAP, ELECT 47-25 SME(HE, LH, U)
C236	★87-010-408-010	CAP, ELECT 47-50 SME
C237	★87-010-403-010	CAP, ELECT 3.3-50 SME
C238	★87-010-403-010	CAP, ELECT 3.3-50 SME
C241	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y(Z)
C242	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y(Z)
C243	★87-018-104-010	CAP, CERA-SOL SS 10P-50 SL
C244	★87-018-104-010	CAP, CERA-SOL SS 10P-50 SL
C245	★87-010-260-010	CAP, ELECT 47-25 SME
C246	★87-010-260-010	CAP, ELECT 47-25 SME
C247	★87-018-119-010	CAP, CERA-SOL SS 100P-50 B
C248	★87-018-119-010	CAP, CERA-SOL SS 100P-50 B
C303	★87-018-123-010	CAP, CERA-SOL SS 220P-50 B
C304	★87-018-123-010	CAP, CERA-SOL SS 220P-50 B

REF. NO.	PART NO.	DESCRIPTION
C309	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C310	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C313	★87-018-205-010	CAP, CERA-SOL SS 0.022-25 F
C314	★87-010-260-010	CAP, ELECT 47-25 SME
C351	★87-018-121-010	CAP, CERA-SOL SS 150P-50 B
C352	★87-018-121-010	CAP, CERA-SOL SS 150P-50 B
C353	★87-018-124-010	CAP, CERA-SOL SS 270P-50 B
C354	★87-018-124-010	CAP, CERA-SOL SS 270P-50 B
C355	★87-010-260-010	CAP, ELECT 47-25 SME
C361	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C362	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C365	★87-018-205-010	CAP, CERA-SOL SS 0.022-25 F
C401	★87-010-402-010	CAP, ELECT 2.2-50 SME
C402	★87-010-402-010	CAP, ELECT 2.2-50 SME
C403	★87-018-132-010	CAP, CERA-SOL SS 2200P-16 X
C404	★87-018-132-010	CAP, CERA-SOL SS 2200P-16 X
C407	★87-010-401-010	CAP, ELECT 1-50 SME
C408	★87-010-401-010	CAP, ELECT 1-50 SME
C415	★87-018-121-010	CAP, CERA-SOL SS 150P-50 B
C416	★87-018-121-010	CAP, CERA-SOL SS 150P-50 B
C451	★87-018-123-010	CAP, CERA-SOL SS 220P-50 B
C452	★87-018-123-010	CAP, CERA-SOL SS 220P-50 B
C453	★87-018-131-010	CAP, CERA-SOL SS 1000P-50 B
C455	★87-018-131-010	CAP, CERA-SOL SS 1000P-50 B
C456	★87-010-260-010	CAP, ELECT 47-25 SME
C459	★87-018-198-010	CAP, CERA-SOL SS 2700P-16 X
C501	★87-010-405-010	CAP, ELECT 10-50 SME
C502	★87-010-405-010	CAP, ELECT 10-50 SME
C503	★87-018-195-010	CAP, CERA-SOL SS 1200P-16 X
C504	★87-018-195-010	CAP, CERA-SOL SS 1200P-16 X
C505	★87-010-401-010	CAP, ELECT 1-50 SME
C506	★87-010-401-010	CAP, ELECT 1-50 SME
C507	★87-018-131-010	CAP, CERA-SOL SS 1000P-50 B
C508	★87-018-131-010	CAP, CERA-SOL SS 1000P-50 B
C509	★87-010-371-010	CAP, ELECT 470-6.3
C515	★87-010-545-010	CAP, ELECT 0.22-50 SME
C516	★87-010-545-010	CAP, ELECT 0.22-50 SME
C517	★87-010-400-010	CAP, ELECT 0.47-50 SME
C518	★87-010-400-010	CAP, ELECT 0.47-50 SME
C520	★87-018-133-010	CAP, CERA-SOL SS 4700P-16 X
C521	★87-018-100-010	CAP, CERA-SOL SS 4.7P-50 SL
C522	★87-018-100-010	CAP, CERA-SOL SS 4.7P-50 SL
C523	★87-018-133-010	CAP, CERA-SOL SS 4700P-16 X
C524	★87-018-133-010	CAP, CERA-SOL SS 4700P-16 X
C525	★87-018-121-010	CAP, CERA-SOL SS 150P-50 B
C526	★87-010-260-010	CAP, ELECT 47-25 SME
C527	★87-010-401-010	CAP, ELECT 1-50 SME
C528	★87-018-100-010	CAP, CERA-SOL SS 4.7P-50 SL
C581	★87-010-405-010	CAP, ELECT 10-50 SME
C582	★87-010-405-010	CAP, ELECT 10-50 SME
C590	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C601	★87-010-401-010	CAP, ELECT 1-50 SME
C602	★87-010-401-010	CAP, ELECT 1-50 SME
C605	★87-018-121-010	CAP, CERA-SOL SS 150P-50 B
C606	★87-018-121-010	CAP, CERA-SOL SS 150P-50 B
C607	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C608	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C609	★87-010-401-010	CAP, ELECT 1-50 SME
C610	★87-010-401-010	CAP, ELECT 1-50 SME
C611	★87-010-404-010	CAP, ELECT 4.7-50 SME
C612	★87-010-404-010	CAP, ELECT 4.7-50 SME
C615	★87-018-198-010	CAP, CERA-SOL SS 2700P-16 X
C616	★87-018-198-010	CAP, CERA-SOL SS 2700P-16 X
C617	★87-018-122-010	CAP, CERA-SOL SS 180P-50 B
C618	★87-018-122-010	CAP, CERA-SOL SS 180P-50 B
C621	★87-010-400-010	CAP, ELECT 0.47-50 SME
C622	★87-010-400-010	CAP, ELECT 0.47-50 SME
C623	★87-010-404-010	CAP, ELECT 4.7-50 SME
C624	★87-010-404-010	CAP, ELECT 4.7-50 SME
C628	★87-010-404-010	CAP, ELECT 4.7-50 SME
C630	★87-010-405-010	CAP, ELECT 10-50 SME
C631	★87-010-401-010	CAP, ELECT 1-50 SME
C632	★87-010-401-010	CAP, ELECT 1-50 SME
C633	★87-010-101-010	CAP, ELECT 220-16 SME
C636	★87-010-404-010	CAP, ELECT 4.7-50 SME
C700	★87-010-221-010	CAP, ELECT 470-10
C701	★87-010-384-010	CAP, ELECT 100-25 SME
C702	★87-010-404-010	CAP, ELECT 4.7-50 SME
C703	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C704	★87-018-148-019	CAP, CERA-SOL SS 12P-50
C705	★87-010-248-010	CAP, ELECT 220-10 SME
C706	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C707	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C708	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C710	★87-018-149-010	CAP, CERA-SOL SS 15P-50 CH
C713	★87-018-199-010	CAP, CERA-SOL SS 3300P-16 X
C714	★87-018-199-010	CAP, CERA-SOL SS 3300P-16 X
C715	★87-018-195-010	CAP, CERA-SOL SS 1200P-16 X
C716	★87-018-195-010	CAP, CERA-SOL SS 1200P-16 X
C720	★87-018-121-010	CAP, CERA-SOL SS 150P-50 B
C721	★87-010-401-010	CAP, ELECT 1-50 SME
C722	★87-010-401-010	CAP, ELECT 1-50 SME
C723	★87-010-405-010	CAP, ELECT 10-50 SME
C724	★87-014-057-010	CAP, PP 1000P-100 J
C725	★87-010-401-010	CAP, ELECT 1-50 SME
C726	★87-010-403-010	CAP, ELECT 3.3-50 SME
C727	★87-010-248-010	CAP, ELECT 220-10 SME
C728	★87-010-402-010	CAP, ELECT 2.2-50 SME
C729	★87-010-402-010	CAP, ELECT 2.2-50 SME
C741	★87-010-402-010	CAP, ELECT 2.2-50 SME
C742	★87-018-125-010	CAP, CERA-SOL SS 330P-50 B
C743	★87-010-382-010	CAP, ELECT 22-25 SME
C744	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C745	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C746	★87-010-401-010	CAP, ELECT 1-50 SME
C748	★87-010-404-010	CAP, ELECT 4.7-50 SME
C749	★87-010-405-010	CAP, ELECT 10-50 SME
C750	★87-010-544-010	CAP, ELECT 0.1-50
C751	★87-010-403-010	CAP, ELECT 3.3-50 SME
C752	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C754	★87-010-260-010	CAP, ELECT 47-25 SME
C755	★87-010-401-010	CAP, ELECT 1-50 SME
C756	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C760	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C802	★87-018-102-010	CAP, CERA-SOL SS 6.8P-50 SL
C802	★87-018-105-010	CAP, CERA-SOL SS 12P-50 SL(Z)
C804	★87-018-102-010	CAP, CERA-SOL SS 6.8P-50 SL
C805	★87-018-098-010	CAP, CERA-SOL SS 3.3P-50 SL
C805	★87-018-097-010	CAP, CERA-SOL SS 2.2P-50 SL
C806	★87-018-096-010	CAP, CERA-SOL SS 1P-50 SL
C807	★87-018-100-010	CAP, CERA-SOL SS 4.7P-50 SL
C807	★87-018-106-010	CAP, CERA-SOL SS 15P-50 SL(Z)</

REF. NO.	PART NO.	DESCRIPTION
C815	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C816	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y(Z)
C817	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C818	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C819	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C820	★87-010-260-010	CAP, ELECT 47-25 SME
C821	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C822	★87-018-103-010	CAP, CERA-SOL SS 8.2P-50 SL
C823	★87-018-107-010	CAP, CERA-SOL SS 18P-50 SL
C826	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y(E, K, Z)
C830	★87-018-214-010	CAP, CERA-SOL SS 0.1-50 F(E, K)
C830	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y(Z)
C831	★87-018-102-010	CAP, CERS-SOL 6.8P-50 SL(EXCEPT Z)
C831	★87-018-105-010	CAP, CERA-SOL SS 12P-50 SL(Z)
C832	★87-018-108-010	CAP, CERA-SOL SS 20P-50 SL(Z)
C833	★87-018-205-010	CAP, CERA-SOL SS 0.022-25 F(Z)
C834	★87-018-103-010	CAP, CERA-SOL SS 8.2P-50 SL(Z)
C839	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C850	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y(E, K)
C850	★87-018-205-010	CAP, CERA-SOL SS 0.022-25 F(Z)
C941	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y(E, K, Z)
C942	★87-018-105-010	CAP, CERA-SOL SS 12P-50 SL(E, K)
C942	★87-018-104-010	CAP, CERA-SOL SS 10P-50 SL(Z)
C944	★87-018-105-010	CAP, CERA-SOL SS 12P-50 SL(HE, LH, U)
C944	★87-018-104-010	CAP, CERA-SOL SS 10P-50 SL(E, K, Z)
C945	★87-014-050-010	CAP, CERA-SOL SS 510P-100 PP(E, K, Z)
C946	★87-010-401-010	CAP, ELECT 1-50 SME
C949	★87-018-214-010	CAP, CERA-SOL SS 0.1-50 F(E, K, Z)
C983	★87-010-544-010	CAP, ELECT 0.1-50
C990	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y
C991	★87-018-134-010	CAP, CERA-SOL SS 0.01-16 Y(E, K, Z)
CF741	★82-794-670-010	CF BFU450C4N
CF801	★87-008-261-010	FILTER, SFE10, 7MA5-A(EXCEPT Z)
CF801	★87-799-621-010	FILTER, SFE10, 7MS2-A(Z)
CF802	★87-008-261-010	FILTER, SFE10, 7MA5-A
CF803	★87-008-261-010	FILTER, SFE10, 7MA5-A(Z)
FT101	★81-MX4-645-110	FLAT CABLE, 7P-2, 0
J250	★87-049-855-010	JACK, 6.3 W/S (PHONES)
J253	★80-MT3-616-019	JACK, PIN 2P(SURROUND SPEAKERS) (EXCEPT Z)
J253	★80-MT3-631-019	JACK, PIN 2P(SURROUND SPEAKERS) (Z)
J254	★87-033-215-019	TERMINAL SP 4P R(SPEAKERS)
J652	★80-MT3-616-019	JACK, PIN 2P(AUX)
J801	★87-033-214-019	ANT TERM 4P (HE, LH, U)
J801	★81-631-646-019	ANT TERM 2P PAL(E, K, Z)
L201	★87-005-336-019	COIL, 1UH(Z)
L202	★87-005-336-019	COIL, 1UH(Z)
L401	★87-003-131-010	COIL, 10MH-L
L402	★87-003-131-010	COIL, 10MH-L
L403	★87-005-525-010	COIL, 22MH-J
L404	★87-005-525-010	COIL, 22MH-J
L451	★87-007-300-010	COIL, OSC BIAS 85K
L701	★81-631-643-010	COIL
L702	★81-631-643-010	COIL
L741	★81-631-611-010	COIL, QUAD
L742	★87-008-452-010	FILTER, CFAZ450
L801	★87-006-219-010	COIL, ANT FM 3/4T, S
L802	★87-006-198-010	COIL, ANT FM 2-3/4 TS, L5
L803	★87-006-200-010	COIL, RF FM 3-1/2T, L5
L804	★87-006-220-010	COIL, RF FM 3-1-2 TS, L5
L805	★87-003-098-010	COIL, 2.2UH
L806	★87-003-145-010	COIL, 8.2UH LAL02
L807	★87-007-259-010	COIL OSC FM
L831	★87-006-202-010	COIL, RF FM46SR, L5(Z)
L832	★87-003-098-010	COIL, 2.2UH
L941	★87-006-206-010	COIL, ANT LW(E, K, Z)
L942	★87-007-305-010	COIL, OSC LW P (12017X) (E, K, Z)
R243	★87-022-050-010	RES, METAL 1W-0.22J(EXCEPT U)

REF. NO.	PART NO.	DESCRIPTION
R244	★87-022-050-010	RES, METAL 1W-0.22J(EXCEPT U)
R257	★87-022-391-010	RES, M/F 0.47-1W(EXCEPT U)
R258	★87-022-391-010	RES, M/F 0.47-1W(EXCEPT U)
RY101	★87-045-335-010	RELAY, G5Z-2A 12VDC
SFR301	★87-024-168-010	SFR, 1K DIA6V
SFR302	★87-024-168-010	SFR, 1K DIA6V
SFR351	★87-024-168-010	SFR, 1K DIA6V
SFR352	★87-024-168-010	SFR, 1K DIA6V
SFR401	★87-024-171-010	SFR, 4.7K DIA6V
SFR402	★87-024-171-010	SFR, 4.7K DIA6V
SFR451	★87-024-175-010	SFR, 47K DIA6V
SFR452	★87-024-175-010	SFR, 47K DIA6V
SFR571	★87-024-172-010	SFR, 10K DIA6V
SFR721	★87-024-171-010	SFR, 4.7K DIA6V
SFR722	★87-024-174-010	SFR, 33K DIA6V
TC801	★87-011-219-010	CAP TRIMMER 10P
TC802	★87-011-219-010	CAP TRIMMER 10P
TC803	★87-011-219-010	CAP TRIMMER 10P(Z)
TC942	★87-011-221-010	CAP TRIMMER 30P VCT51(E, K, Z)
TU101	★81-MX4-620-019	AM PACK 3(HE, LH, U)
TU101	★81-MX4-619-019	AM PACK 4(E, K, Z)
VC801	★87-027-900-010	VARI-CAP, 1SV147
VC802	★87-027-900-010	VARI-CAP, 1SV147
VC803	★87-027-900-010	VARI-CAP, 1SV147
VC804	★87-027-900-010	VARI-CAP, 1SV147(Z)
VR651	★81-MX4-636-010	VR, 50KBX2(AUX INPUT LEVEL)
X701	★87-030-278-010	RESONATOR, CRYSTAL 7.2MHZ S
===FRONT CIRCUIT BOARD SECTION===		
C201	★87-010-264-019	CAP, ELECT 100-10 5L
C202	★87-016-088-049	CAP, ELECT 220-6.3 SR
C203	★87-015-695-019	CAP, ELECT 1-50 7L
C204	★87-010-071-019	CAP, ELECT 1-50 5L
C205	★87-015-698-019	CAP, ELECT 4.7-50 7L
C206	★87-015-698-019	CAP, ELECT 4.7-50 7L
C207	★87-015-698-019	CAP, ELECT 4.7-50 7L
C208	★87-018-214-019	CAP, CERA-SOL SS U 0.1-50 F
C209	★87-018-195-019	CAP, CERA-SOL SS U 1200P-16 X
C210	★87-018-195-019	CAP, CERA-SOL SS U 1200P-16 X
C211	★87-018-131-019	CAP, CERA-SOL SS U 1000P-50 B
C401	★87-018-134-019	CAP, CERA-SOL SS U 0.01-16 Y
C402	★87-010-404-019	CAP, ELECT 4.7-50 SME
C501	★87-010-060-019	CAP, ELECT 100-16
C601	★87-018-205-019	CAP, CERA-SOL SS U 0.022-25 F
C602	★87-018-202-019	CAP, CERA-SOL SS U 6800P-16 X
C603	★87-018-202-019	CAP, CERA-SOL SS U 6800P-16 X
C604	★87-018-202-019	CAP, CERA-SOL SS U 6800P-16 X
C605	★87-018-202-019	CAP, CERA-SOL SS U 6800P-16 X
C606	★87-018-198-019	CAP, CERA-SOL SS U 2700P-16 X
C607	★87-018-198-019	CAP, CERA-SOL SS U 2700P-16 X
C608	★87-018-129-019	CAP, CERA-SOL SS U 680P-50 B
C609	★87-018-129-019	CAP, CERA-SOL SS U 680P-50 B
C610	★87-018-124-019	CAP, CERA-SOL SS U 270P-50 B
C611	★87-018-124-019	CAP, CERA-SOL SS U 270P-50 B
C612	★87-010-068-019	CAP, ELECT 0.22-50 5L
C613	★87-010-068-019	CAP, ELECT 0.22-50 5L
C614	★87-010-068-019	CAP, ELECT 0.22-50 5L
C615	★87-010-545-019	CAP, ELECT 0.22-50 SME
C616	★87-010-068-019	CAP, ELECT 0.22-50 5L
C617	★87-015-689-019	CAP, ELECT 10-35 7L
C618	★87-015-689-019	CAP, ELECT 10-35 7L
C701	★87-018-195-019	CAP, CERA-SOL SS U 1200P-16 X
C702	★87-015-695-019	CAP, ELECT 1-50 7L
C703	★87-010-401-019	CAP, ELECT 1-50 SME
C704	★87-018-125-019	CAP, CERA-SOL SS U 330P-50 B
C705	★87-010-545-019	CAP, ELECT 0.22-50 SME
C706	★87-018-128-019	CAP, CERA-SOL SS U 560P-50 B
C707	★87-010-263-019	CAP, ELECT 100-10

REF. NO.	PART NO.	DESCRIPTION
C708	★87-010-544-019	CAP, ELECT 0.1-50
C710	★87-018-214-019	CAP, CERA-SOL SS U 0.1-50 F
C801	★87-018-119-019	CAP, CERA-SOL SS U 100P-50 B(HE)
C802	★87-010-544-019	CAP, ELECT 0.1-50(HE)
C803	★87-018-125-019	CAP, CERA-SOL SS U 330P-50 B(HE)
C804	★87-018-128-019	CAP, CERA-SOL SS U 560P-50 B(HE)
C805	★87-010-068-019	CAP, ELECT 0.22-50 5L(HE)
C806	★87-010-406-019	CAP, ELECT 22-50 SME(HE)
C807	★87-018-127-019	CAP, CERA-SOL SS U 470P-50 B(HE)
C808	★87-018-196-019	CAP, CERA-SOL SS U 1500P-16 X(HE)
C809	★87-018-196-019	CAP, CERA-SOL SS U 1500P-16 X(HE)
C810	★87-018-197-019	CAP, CERA-SOL SS U 1800P-16 X(HE)
C811	★87-018-128-019	CAP, CERA-SOL SS U 560P-50 B(HE)
C812	★87-010-544-019	CAP, ELECT 0.1-50(HE)
C813	★87-010-544-019	CAP, ELECT 0.1-50(HE)
C814	★87-018-111-019	CAP, CERA-SOL SS U 27P-50 SL(HE)
C815	★87-015-697-019	CAP, ELECT 3.3-50 7L(HE)
C816	★87-010-263-019	CAP, ELECT 100-10(HE)
C817	★87-018-125-019	CAP, CERA-SOL SS U 330P-50 B(HE)
C818	★87-015-694-019	CAP, ELECT 0.47-50 7L(HE)
C819	★87-018-134-019	CAP, CERA-SOL SS U 0.01-16 Y(HE)
FL101	★82-MX3-633-010	FL, BJ 083GK
J701	★81-MX4-630-019	JACK, 3.5(MIC)
LED401	★87-002-738-010	LED, SEL2210R(TAPE/DECK1/2)
LED402	★87-002-738-010	LED, SEL2210R(TUNER/BAND)
LED403	★87-002-738-010	LED, SEL2210R(AUX)
LED404	★87-002-738-010	LED, SEL2210R(NR)
LED405	★89-VW5-606-019	LED, SLH-38MC(STOP)
LED406	★89-VW5-606-019	LED, SLH-38MC(DOWN)
LED407	★89-VW5-606-019	LED, SLH-38MC(PLAY/DIRECTION)
LED408	★89-VW5-606-019	LED, SLH-38MC(PLAY/DIRECTION)
LED409	★89-VW5-606-019	LED, SLH-38MC(UP)
LED410	★89-VW5-606-019	LED, SLH-38MC(PAUSE)
LED411	★87-002-885-019	LED, SLZ481C-02 ABY (DIGITAL HIFI CD3)
LED412	★87-002-885-019	LED, SLZ481C-02 ABY (DIGITAL HIFI CD3)
LED413	★87-002-885-019	LED, SLZ481C-02 ABY (DIGITAL HIFI CD3)
LED414	★87-002-885-019	LED, SLZ481C-02 ABY (DIGITAL HIFI CD3)
LED415	★87-002-885-019	LED, SLZ481C-02 ABY (DIGITAL HIFI CD3)
LED416	★87-002-885-019	LED, SLZ481C-02 ABY (DIGITAL HIFI CD3)
LED417	★87-002-885-019	LED, SLZ481C-02 ABY (DIGITAL HIFI CD3)
LED418	★87-002-885-019	LED, SLZ481C-02 ABY (DIGITAL HIFI CD3)
S301	★87-036-215-019	SW, TACT(PAUSE/DECK2) (HE, LH, U)
S301	★87-036-259-018	SW, TACT(PAUSE/DECK2) (E, K, Z)
S302	★87-036-215-019	SW, TACT(RECORD/REC MUTE) (HE, LH, U)
S302	★87-036-259-018	SW, TACT(RECORD/REC MUTE) (E, K, Z)
S303	★87-036-215-019	SW, TACT(SYN. DUBBING/HIGH) (HE, LH, U)
S303	★87-036-259-018	SW, TACT(SYN. DUBBING/HIGH) (E, K, Z)
S304	★87-036-215-019	SW, TACT(SYN. DUBBING/NORMAL) (HE, LH, U)
S304	★87-036-215-019	SW, TACT(SYN. DUBBING/NORMAL) (E, K, Z)
S304	★87-036-259-018	SW, TACT(SYN. DUBBING/NORMAL) (E, K, Z)
S305	★87-036-215-019	SW, TACT(TUNING) (HE, LH, U)
S305	★87-036-259-018	SW, TACT(TUNING) (E, K, Z)
S306	★87-036-215-019	SW, TACT(PRESET) (HE, LH, U)
S306	★87-036-215-019	SW, TACT(PRESET) (E, K, Z)
S306	★87-036-259-018	SW, TACT(PRESET) (E, K, Z)
S307	★87-036-215-019	SW, TACT(CLOCK) (HE, LH, U)
S307	★87-036-259-018	SW, TACT(CLOCK) (E, K, Z)
S308	★87-036-215-019	SW, TACT(FM MODE) (HE, LH, U)
S308	★87-036-215-019	SW, TACT(FM MODE) (E, K, Z)
S308	★87-036-259-018	SW, TACT(FM MODE) (E, K, Z)
S309	★87-036-215-019	SW, TACT(UP) (HE, LH, U)
S309	★87-036-259-018	SW, TACT(UP) (E, K, Z)

REF. NO.	PART NO.	DESCRIPTION
S310	★87-036-215-019	SW, TACT(DOWN) (HE, LH, U)
S310	★87-036-259-018	SW, TACT(DOWN) (E, K, Z)
S311	★87-036-215-019	SW, TACT(PLAY/DIRECTION) (HE, LH, U)
S311	★87-036-259-018	SW, TACT(PLAY/DIRECTION) (E, K, Z)
S312	★87-036-215-019	SW, TACT(STOP) (HE, LH, U)
S312	★87-036-259-018	SW, TACT(STOP) (E, K, Z)
S317	★87-036-215-019	SW, TACT(CLASSIC) (HE, LH, U)
S317	★87-036-259-018	SW, TACT(CLASSIC) (E, K, Z)
S321	★87-036-215-019	SW, TACT(POP) (HE, LH, U)
S321	★87-036-259-018	SW, TACT(POP) (E, K, Z)
S322	★87-036-215-019	SW, TACT(T-BASS) (HE, LH, U)
S322	★87-036-259-018	SW, TACT(T-BASS) (E, K, Z)
S323	★87-036-215-019	SW, TACT(BBE) (HE, LH, U)
S323	★87-036-259-018	SW, TACT(BBE) (E, K, Z)
S324	★87-036-215-019	SW, TACT(ROCK) (HE, LH, U)
S324	★87-036-259-018	SW, TACT(ROCK) (E, K, Z)
S325	★87-036-215-019	SW, TACT(CD) (HE, LH, U)
S325	★87-036-259-018	SW, TACT(CD) (E, K, Z)
S326	★87-036-215-019	SW, TACT(TAPE/DECK1/2) (HE, LH, U)
S326	★87-036-259-018	SW, TACT(TAPE/DECK1/2) (E, K, Z)
S327	★87-036-215-019	SW, TACT(TUNER/BAND) (HE, LH, U)
S327	★87-036-259-018	SW, TACT(TUNER/BAND) (E, K, Z)
S328	★87-036-215-019	SW, TACT(AUX) (HE, LH, U)
S328	★87-036-259-018	SW, TACT(AUX) (E, K, Z)
S329	★87-036-215-019	SW, TACT(REV MODE/DECK2) (HE, LH, U)
S329	★87-036-259-018	SW, TACT(REV MODE/DECK2) (E, K, Z)
S330	★87-036-215-019	SW, TACT(DOLBY NR) (HE, LH, U)
S330	★87-036-259-018	SW, TACT(DOLBY NR) (E, K, Z)
S331	★87-036-215-019	SW, TACT(SLEEP) (HE, LH, U)
S331	★87-036-259-018	SW, TACT(SLEEP) (E, K, Z)
S332	★87-036-215-019	SW, TACT(STANDBY) (HE, LH, U)
S332	★87-036-259-018	SW, TACT(STANDBY) (E, K, Z)
S333	★87-036-215-019	SW, TACT(POWER) (HE, LH, U)
S333	★87-036-259-018	SW, TACT(POWER) (E, K, Z)
S334	★87-036-215-019	SW, TACT(VOCAL FADER) (HE, LH, U)
S334	★87-036-259-018	SW, TACT(VOCAL FADER) (E, K, Z)
S335	★87-036-215-019	SW, TACT(1) (HE, LH, U)
S335	★87-036-259-018	SW, TACT(1) (E, K, Z)
S336	★87-036-215-019	SW, TACT(MUTE) (HE, LH, U)
S336	★87-036-259-018	SW, TACT(MUTE) (E, K, Z)
S337	★87-036-215-019	SW, TACT(DEMO) (HE, LH, U)
S337	★87-036-259-018	SW, TACT(DEMO) (E, K, Z)
S338	★87-036-215-019	SW, TACT(2) (HE, LH, U)
S338	★87-036-259-018	SW, TACT(2) (E, K, Z)
S339	★87-036-215-019	SW, TACT(3) (HE, LH, U)
S339	★87-036-259-018	SW, TACT(3) (E, K, Z)
VR701	★81-MX4-637-019	VR, 10KA RKK11K130 (MIXING PLAY)
VR702	★81-MX4-638-019	VR, SL 10KB(ECHO LEVEL) (HE)
X201	★89-MX1-704-019	CERA LOCK (MJ) 3.3M±Z
===MVR CIRCUIT BOARD SECTION===		
C851	★87-010-401-010	CAP, ELECT 1-50 SME
C852	★87-010-401-010	CAP, ELECT 1-50 SME
C855	★87-018-199-010	CAP, CERA-SOL SS 3300P-16 X
C856	★87-018-199-010	CAP, CERA-SOL SS 3300P-16 X
C857	★87-018-121-010	CAP, CERA-SOL SS 150P-50 B
C858	★87-018-121-010	CAP, CERA-SOL SS 150P-50 B
C863	★87-018-129-010	CAP, CERA-SOL SS 680P-50 B
C864	★87-018-129-010	CAP, CERA-SOL SS 680P-50 B
C865	★87-010-404-010	CAP, ELECT 4-7-50 SME
C866	★87-010-404-010	CAP, ELECT 4-7-50 SME
C867	★87-010-401-010	CAP, ELECT 1-50 SME
C868	★87-010-401-010	CAP, ELECT 1-50 SME
C869	★87-010-544-010	CAP, ELECT 0.1-50
C870	★87-010-263-010	CAP, ELECT 100-10
C871	★87-010-263-010	CAP, ELECT 100-10
C872	★87-018-205-010	CAP, CERA-SOL SS 0.222-25 F

REF. NO.	PART NO.	DESCRIPTION
C708	★87-010-544-019	CAP, ELECT 0.1-50
C710	★87-018-214-019	CAP, CERA-SOL SS U 0.1-50 F
C801	★87-018-119-019	CAP, CERA-SOL SS U 100P-50 B(HE)
C802	★87-010-544-019	CAP, ELECT 0.1-50 (HE)
C803	★87-018-125-019	CAP, CERA-SOL SS U 330P-50 B(HE)
C804	★87-018-128-019	CAP, CERA-SOL SS U 560P-50 B(HE)
C805	★87-010-068-019	CAP, ELECT 0.22-50 5L(HE)
C806	★87-010-406-019	CAP, ELECT 22-50 SME(HE)
C807	★87-018-127-019	CAP, CERA-SOL SS U 470P-50 B(HE)
C808	★87-018-196-019	CAP, CERA-SOL SS U 1500P-16 X(HE)
C809	★87-018-196-019	CAP, CERA-SOL SS U 1500P-16 X(HE)
C810	★87-018-197-019	CAP, CERA-SOL SS U 1800P-16 X(HE)
C811	★87-018-128-019	CAP, CERA-SOL SS U 560P-50 B(HE)
C812	★87-010-544-019	CAP, ELECT 0.1-50 (HE)
C813	★87-010-544-019	CAP, ELECT 0.1-50 (HE)
C814	★87-018-111-019	CAP, CERA-SOL SS U 27P-50 SL(HE)
C815	★87-015-697-019	CAP, ELECT 3.3-50 7L(HE)
C816	★87-010-263-019	CAP, ELECT 100-10 (HE)
C817	★87-018-125-019	CAP, CERA-SOL SS U 330P-50 B(HE)
C818	★87-015-694-019	CAP, ELECT 0.47-50 7L(HE)
C819	★87-018-134-019	CAP, CERA-SOL SS U 0.01-16 Y(HE)
FL101	★82-MK3-633-010	FL, BJ 083GK
J701	★81-MX4-630-019	JACK, 3.5(MIC)
LED401	★87-002-738-010	LED, SEL2210R(TAPE/DECK1/2)
LED402	★87-002-738-010	LED, SEL2210R(TUNER/BAND)
LED403	★87-002-738-010	LED, SEL2210R(AUX)
LED404	★87-002-738-010	LED, SEL2210R(CD)
LED405	★89-VW5-606-019	LED, SLH-38MC(STOP■)
LED406	★89-VW5-606-019	LED, SLH-38MC(DOWN▶)
LED407	★89-VW5-606-019	LED, SLH-38MC(PLAY/DIRECTION▶)
LED408	★89-VW5-606-019	LED, SLH-38MC(PLAY/DIRECTION◀)
LED409	★89-VW5-606-019	LED, SLH-38MC(UP◀)
LED410	★89-VW5-606-019	LED, SLH-38MC(PAUSE■)
LED411	★87-002-885-019	LED, SLZ481C-02 ABY (DIGITAL HIFI CD3)
LED412	★87-002-885-019	LED, SLZ481C-02 ABY (DIGITAL HIFI CD3)
LED413	★87-002-885-019	LED, SLZ481C-02 ABY (DIGITAL HIFI CD3)
LED414	★87-002-885-019	LED, SLZ481C-02 ABY (DIGITAL HIFI CD3)
LED415	★87-002-885-019	LED, SLZ481C-02 ABY (DIGITAL HIFI CD3)
LED416	★87-002-885-019	LED, SLZ481C-02 ABY (DIGITAL HIFI CD3)
LED417	★87-002-885-019	LED, SLZ481C-02 ABY (DIGITAL HIFI CD3)
LED418	★87-002-885-019	LED, SLZ481C-02 ABY (DIGITAL HIFI CD3)
S301	★87-036-215-019	SW, TACT (PAUSE/DECK2) (HE, LH, U)
S301	★87-036-259-018	SW, TACT (PAUSE/DECK2) (E, K, Z)
S302	★87-036-215-019	SW, TACT (RECORD/REC MUTE) (HE, LH, U)
S302	★87-036-259-018	SW, TACT (RECORD/REC MUTE) (E, K, Z)
S303	★87-036-215-019	SW, TACT (SYN. DUBBING/HIGH) (HE, LH, U)
S303	★87-036-259-018	SW, TACT (SYN. DUBBING/HIGH) (E, K, Z)
S304	★87-036-215-019	SW, TACT (SYN. DUBBING/NORMAL) (HE, LH, U)
S304	★87-036-259-018	SW, TACT (SYN. DUBBING/NORMAL) (E, K, Z)
S305	★87-036-259-018	SW, TACT (TUNING) (HE, LH, U)
S305	★87-036-259-018	SW, TACT (TUNING) (E, K, Z)
S306	★87-036-215-019	SW, TACT (PRESET) (HE, LH, U)
S306	★87-036-259-018	SW, TACT (PRESET) (E, K, Z)
S307	★87-036-215-019	SW, TACT (CLOCK) (HE, LH, U)
S307	★87-036-259-018	SW, TACT (CLOCK) (E, K, Z)
S308	★87-036-215-019	SW, TACT (FM MODE) (HE, LH, U)
S308	★87-036-259-018	SW, TACT (FM MODE) (E, K, Z)
S309	★87-036-215-019	SW, TACT (UP) (HE, LH, U)
S309	★87-036-259-018	SW, TACT (UP) (E, K, Z)

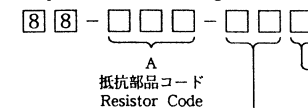
REF. NO.	PART NO.	DESCRIPTION
S310	★87-036-215-019	SW, TACT (DOWN) (HE, LH, U)
S310	★87-036-259-018	SW, TACT (DOWN) (E, K, Z)
S311	★87-036-215-019	SW, TACT (PLAY/DIRECTION) (HE, LH, U)
S311	★87-036-259-018	SW, TACT (PLAY/DIRECTION) (E, K, Z)
S312	★87-036-215-019	SW, TACT (STOP) (HE, LH, U)
S312	★87-036-259-018	SW, TACT (STOP) (E, K, Z)
S317	★87-036-215-019	SW, TACT (CLASSIC) (HE, LH, U)
S317	★87-036-259-018	SW, TACT (CLASSIC) (E, K, Z)
S321	★87-036-215-019	SW, TACT (POP) (HE, LH, U)
S321	★87-036-259-018	SW, TACT (POP) (E, K, Z)
S322	★87-036-215-019	SW, TACT (T-BASS) (HE, LH, U)
S322	★87-036-259-018	SW, TACT (T-BASS) (E, K, Z)
S323	★87-036-215-019	SW, TACT (BBE) (HE, LH, U)
S323	★87-036-259-018	SW, TACT (BBE) (E, K, Z)
S324	★87-036-215-019	SW, TACT (ROCK) (HE, LH, U)
S324	★87-036-259-018	SW, TACT (ROCK) (E, K, Z)
S325	★87-036-215-019	SW, TACT (CD) (HE, LH, U)
S325	★87-036-259-018	SW, TACT (CD) (E, K, Z)
S326	★87-036-215-019	SW, TACT (TAPE/DECK1/2) (HE, LH, U)
S326	★87-036-259-018	SW, TACT (TAPE/DECK1/2) (E, K, Z)
S327	★87-036-215-019	SW, TACT (TUNER/BAND) (HE, LH, U)
S327	★87-036-259-018	SW, TACT (TUNER/BAND) (E, K, Z)
S328	★87-036-215-019	SW, TACT (AUX) (HE, LH, U)
S328	★87-036-259-018	SW, TACT (AUX) (E, K, Z)
S329	★87-036-215-019	SW, TACT (REV. MODE/DECK2) (HE, LH, U)
S329	★87-036-259-018	SW, TACT (REV. MODE/DECK2) (E, K, Z)
S330	★87-036-215-019	SW, TACT (DOLBY NR) (HE, LH, U)
S330	★87-036-259-018	SW, TACT (DOLBY NR) (E, K, Z)
S331	★87-036-215-019	SW, TACT (SLEEP) (HE, LH, U)
S331	★87-036-259-018	SW, TACT (SLEEP) (E, K, Z)
S332	★87-036-215-019	SW, TACT (STANDBY) (HE, LH, U)
S332	★87-036-259-018	SW, TACT (STANDBY) (E, K, Z)
S333	★87-036-215-019	SW, TACT (POWER) (HE, LH, U)
S333	★87-036-259-018	SW, TACT (POWER) (E, K, Z)
S334	★87-036-215-019	SW, TACT (VOCAL FADER) (HE, LH, U)
S334	★87-036-259-018	SW, TACT (VOCAL FADER) (E, K, Z)
S335	★87-036-215-019	SW, TACT (1) (HE, LH, U)
S335	★87-036-259-018	SW, TACT (1) (E, K, Z)
S336	★87-036-215-019	SW, TACT (MUTE) (HE, LH, U)
S336	★87-036-259-018	SW, TACT (MUTE) (E, K, Z)
S337	★87-036-215-019	SW, TACT (DEMO) (HE, LH, U)
S337	★87-036-259-018	SW, TACT (DEMO) (E, K, Z)
S338	★87-036-215-019	SW, TACT (2) (HE, LH, U)
S338	★87-036-259-018	SW, TACT (2) (E, K, Z)
S339	★87-036-215-019	SW, TACT (3) (HE, LH, U)
S339	★87-036-259-018	SW, TACT (3) (E, K, Z)
VR701	★81-MX4-637-019	VR, 10K RKT1K1130 (MIXING PLAY)
VR702	★81-MX4-638-019	VR, SL 10KB (ECHO LEVEL) (HE)
X201	★89-MX1-704-019	CERA LOCK (MU) 3.9MHZ
===MVR CIRCUIT BOARD SECTION===		
C851	★87-010-401-010	CAP, ELECT 1-50 SME
C852	★87-010-401-010	CAP, ELECT 1-50 SME
C855	★87-018-199-010	CAP, CERA-SOL SS 3300P-16 X
C856	★87-018-199-010	CAP, CERA-SOL SS 3300P-16 X
C857	★87-018-121-010	CAP, CERA-SOL SS 150P-50 B
C858	★87-018-121-010	CAP, CERA-SOL SS 150P-50 B
C863	★87-018-129-010	CAP, CERA-SOL SS 680P-50 B
C864	★87-018-129-010	CAP, CERA-SOL SS 680P-50 B
C865	★87-010-404-010	CAP, ELECT 4.7-50 SME
C866	★87-010-404-010	CAP, ELECT 4.7-50 SME
C867	★87-010-401-010	CAP, ELECT 1-50 SME
C868	★87-010-401-010	CAP, ELECT 1-50 SME
C869	★87-010-544-010	CAP, ELECT 0.1-50
C870	★87-010-263-010	CAP, ELECT 100-10
C871	★87-010-263-010	CAP, ELECT 100-10
C872	★87-018-205-010	CAP, CERA-SOL SS 0.022-25 F

REF. NO.	PART NO.	DESCRIPTION
C873	★87-018-123-010	CAP, CERA-SOL SS 220P-50 B
C874	★87-018-123-010	CAP, CERA-SOL SS 220P-50 B
C875	★87-018-119-010	CAP, CERA-SOL SS 100P-50 B
C876	★87-018-119-010	CAP, CERA-SOL SS 100P-50 B
C877	87-018-115-019	CAP, CERA-SOL SS 47P
C878	87-018-115-019	CAP, CERA-SOL SS 47P
MVR850	81-MX4-635-010	VR, 50KBX2 (VOLUME)
===AC CIRCUIT BOARD SECTION===		
FT102	81-MX4-647-010	F-CABEL, 7P-2.5
R101	★87-022-449-019	RES, NF 0.47-1/2W
R102	★87-022-449-019	RES, NF 0.47-1/2W
===DECK-1 CIRCUIT BOARD SECTION===		
S1	87-036-110-019	SW, PUSH (PLAY)
S2	86-575-632-110	SW, LEAF (FR)
S3	87-036-110-019	SW, PUSH (CST)
S4	87-036-110-019	SW, PUSH (LH)
SOL1	★86-575-622-010	SOLENOID (PLAY)
SOL2	★86-575-622-010	SOLENOID (FR)
===DECK-2 CIRCUIT BOARD SECTION===		
M1	87-045-319-019	MOTOR SHU2L
S10	87-036-110-019	SW, PUSH (PLAY)
S11	86-575-632-110	SW, LEAF (FR)
S12	87-036-110-019	SW, PUSH (CST)
S13	87-036-110-019	SW, PUSH (LH)
S14	87-036-109-019	SW, PUSH (REA)
S15	87-036-110-019	SW, PUSH (REB)
SFR10	★87-024-331-019	SFR 5K
SOL10	★86-575-622-010	SOLENOID (PLAY)
SOL11	★86-575-622-010	SOLENOID (FR)

REF. NO.	PART NO.	DESCRIPTION
===RELAY-1 CIRCUIT BOARD SECTION===		
===RELAY-2 CIRCUIT BOARD SECTION===		
===AC VOLTAGE CIRCUIT BOARD SECTION===		
△SW101	87-036-229-019	SW, SLIDE (AC VOLTAGE) (LH, HE)
△SW101	87-036-235-019	SW, SLIDE (AC VOLTAGE) (U)
△F101	87-035-414-019	FUSE, T2A 250V UL (LH, HE, U)
===MISCELLANEOUS===		
△	98-848-127-11Z	OPTICAL PICK UP KSS-210A
△	★87-034-749-019	AC CORD (H) W/PLUG (LH)
△	★82-187-797-019	AC CORD (E) (HE)
△	★87-034-584-019	AC CORD, U SPT2 (U)
△	★87-034-781-019	AC CORD (E) (E, Z)
△	★87-034-592-018	AC CORD (K) (K)
△	★87-085-185-010	BUSHING, AC CORD E (H, HE, E, K, Z)
△	★87-085-184-010	BUSHING, AC CORD D (LH)
△	★87-085-189-010	BUSHING, AC CORD U (U)
CON301	★81-MX4-661-019	CONNECTOR ASSY HEAD [PB] (D1)
CON351	★81-MX4-662-019	CONNECTOR ASSY HEAD 2 (D2)
PH	87-046-355-010	P HEAD (D1)
RPEH	87-046-356-010	R, P, E HEAD (D2)
△PT101	★82-NK4-622-019	POWER TRANSFORMER, 2NK-4H (LH, HE)
△PT101	★82-NK4-623-019	POWER TRANSFORMER, 2NK-4 U (U)
△PT101	★82-NK4-624-018	POWER TRANSFORMER, 2NK-4 E (E, Z)
△PT101	★82-NK4-625-018	POWER TRANSFORMER, 2NK-4 K (K)

○ チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



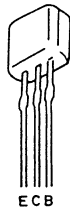
チップ抵抗
Chip resistor

Wattage 容量	Type 種類	Tolerance 許容誤差	Symbol 記号	Dimensions/寸法 (mm)	Resistor Code : A 抵抗コード : A
1/32W	1608	± 5 %	CJ	Form/外形	
1/10W	2125	± 5 %	CJ		
1/8W	3126	± 5 %	CJ		

TRANSISTOR ILLUSTRATION



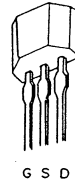
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2SA1318
2SA952
2SC1815
2SC1923
2SC2001
2SC3266
2SC3331
2SD655



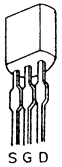
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DTA114ES
DTA114YS
DTA144
DTC114
DTC143
DTC144
DTD123YS



2SB1370



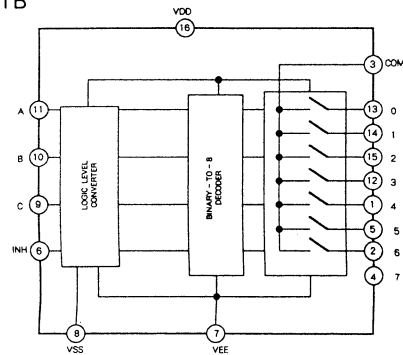
2SK241



2SK246

IC BLOCK DIAGRAM

IC, BU4051B

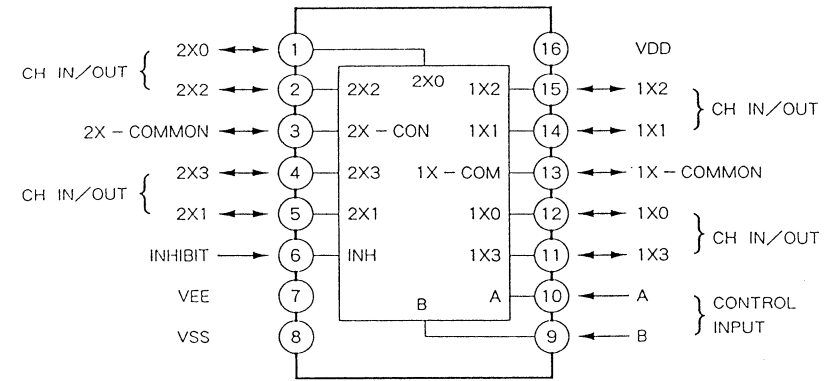


TRUTH TABLE

CONTROL INPUTS				"ON" CHANNEL
INHIBIT	C	B	A	
L	L	L	L	0
L	L	L	H	1
L	L	H	L	2
L	L	H	H	3
L	H	L	L	4
L	H	L	H	5
L	H	H	L	6
L	H	H	H	7
H	*	*	*	NOTE

* Don't Care

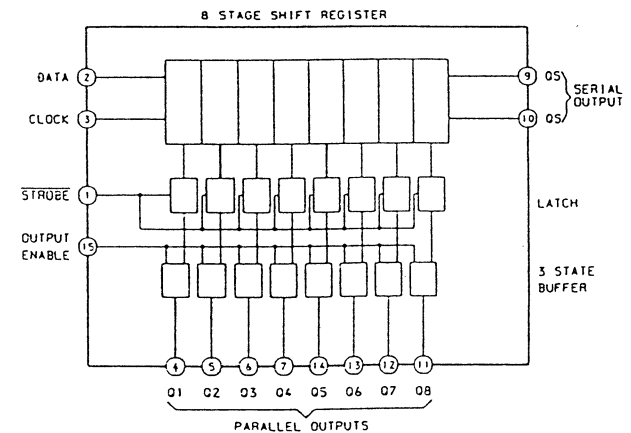
IC, BU4052B



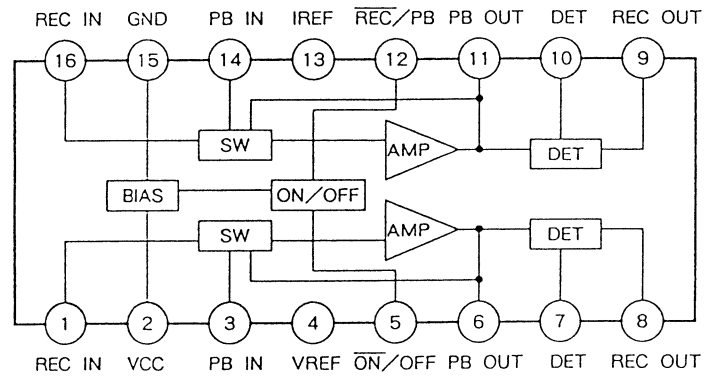
TRUTH TABLE

INHIBIT INPUT	CONTROL INPUT		SWITCHES BETWEEN CHANNEL INPUT/OUTPUT COMMON PINS			
INHIBIT	B	A	X0	X1	X2	X3
L	L	L	ON	OFF	OFF	OFF
L	L	H	OFF	ON	OFF	OFF
L	H	L	OFF	OFF	ON	OFF
L	H	H	OFF	OFF	OFF	ON
H	X	X	OFF	OFF	OFF	OFF

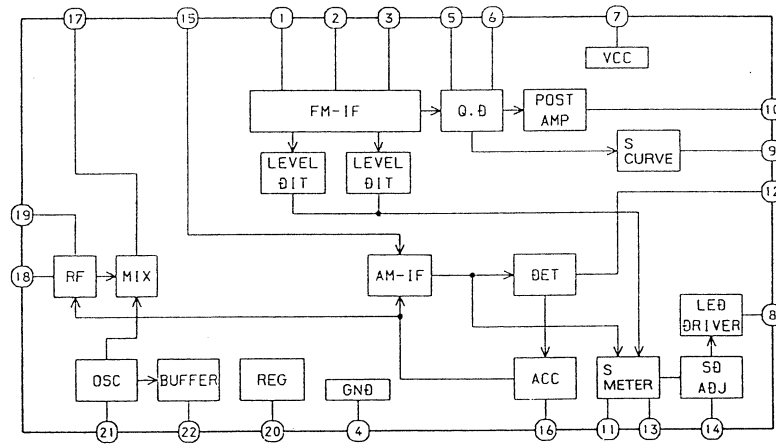
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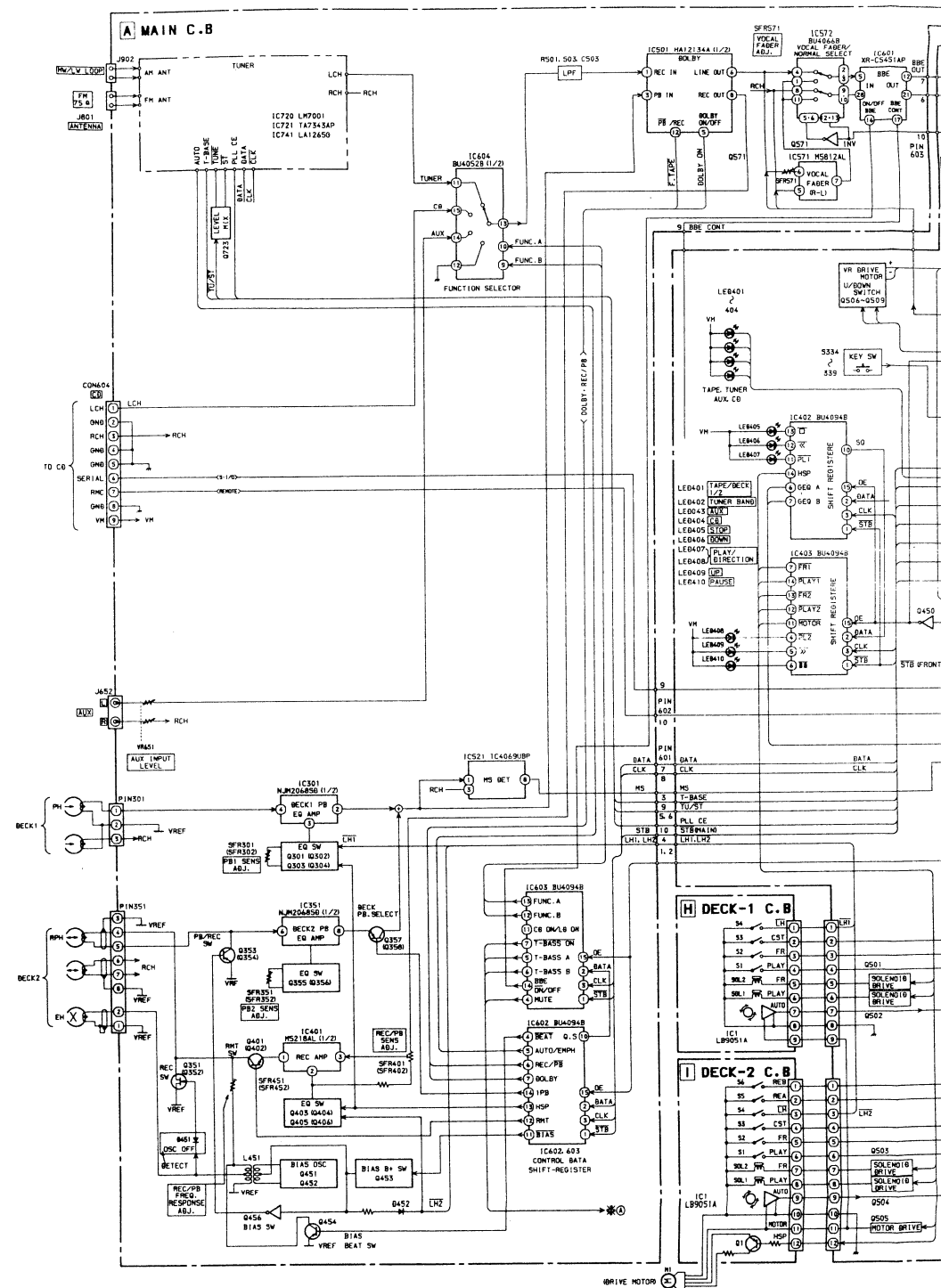
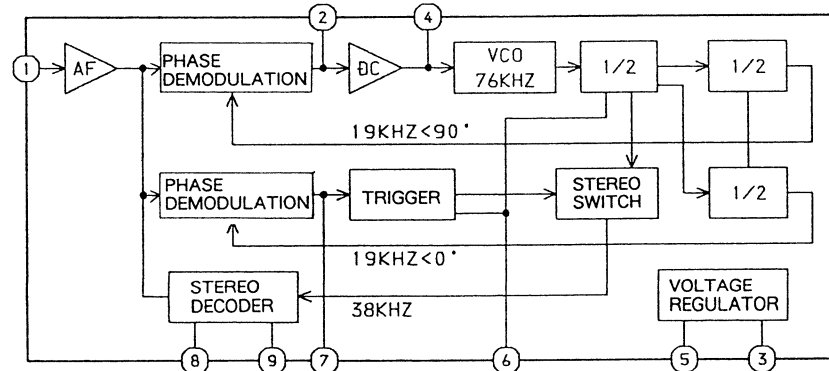
IC, HA12134A



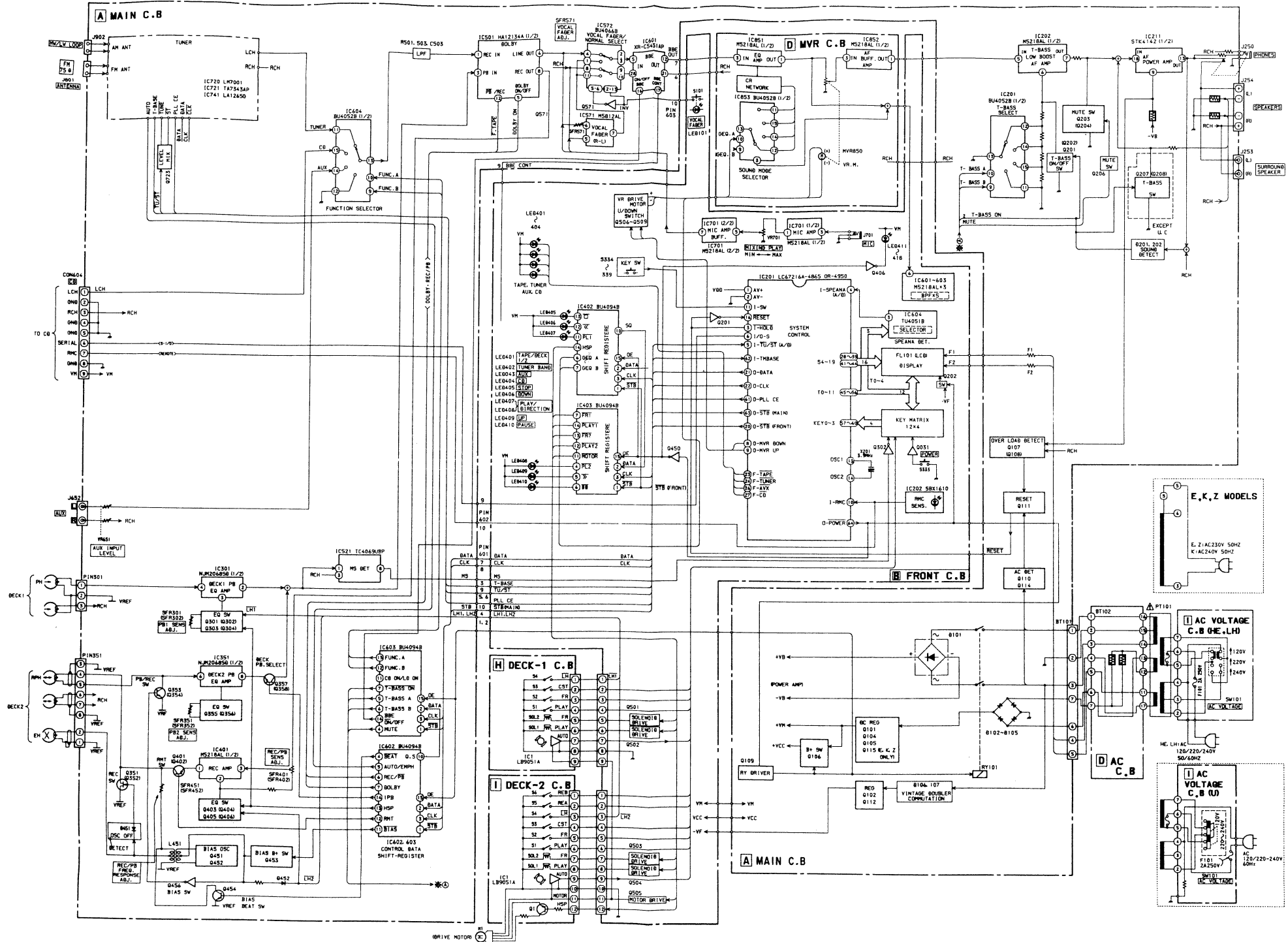
IC, LA1265



IC, TA7343AP

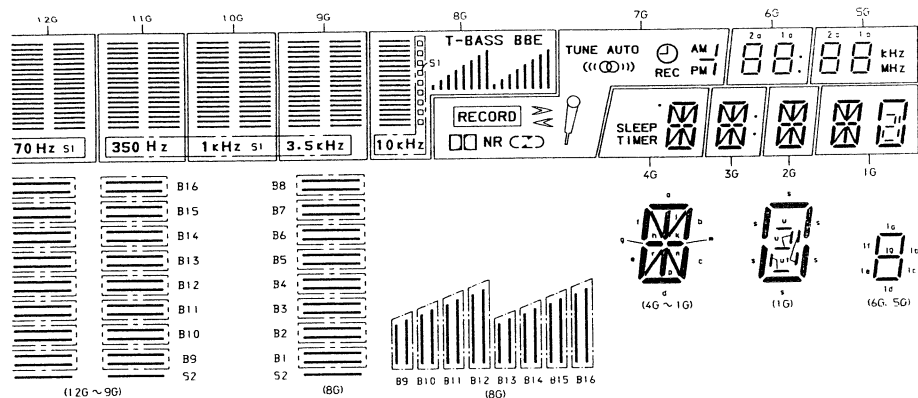


BLOCK DIAGRAM - 1



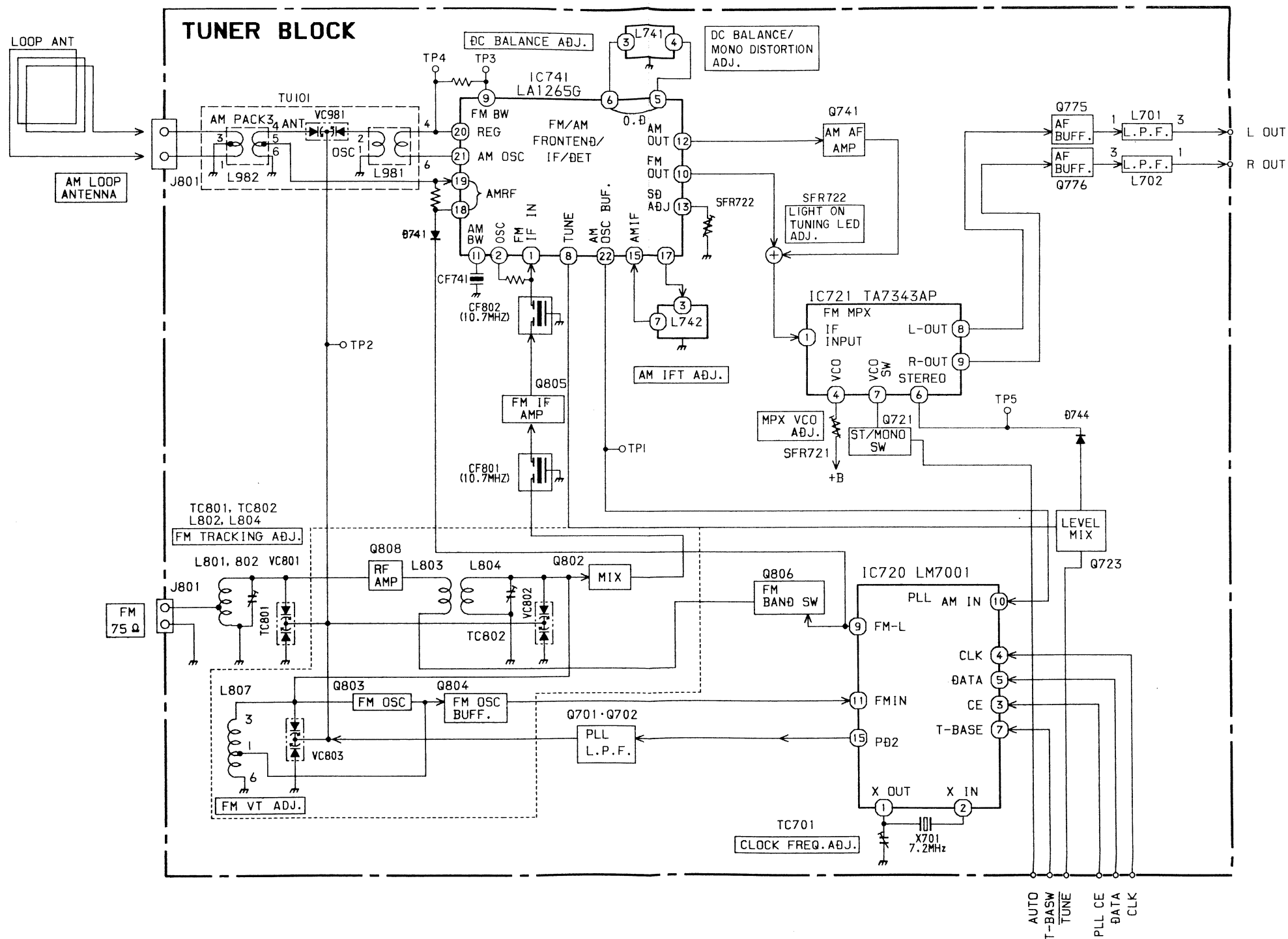
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;RID ASSIGNMENT

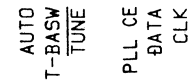


NODE CONNECTION

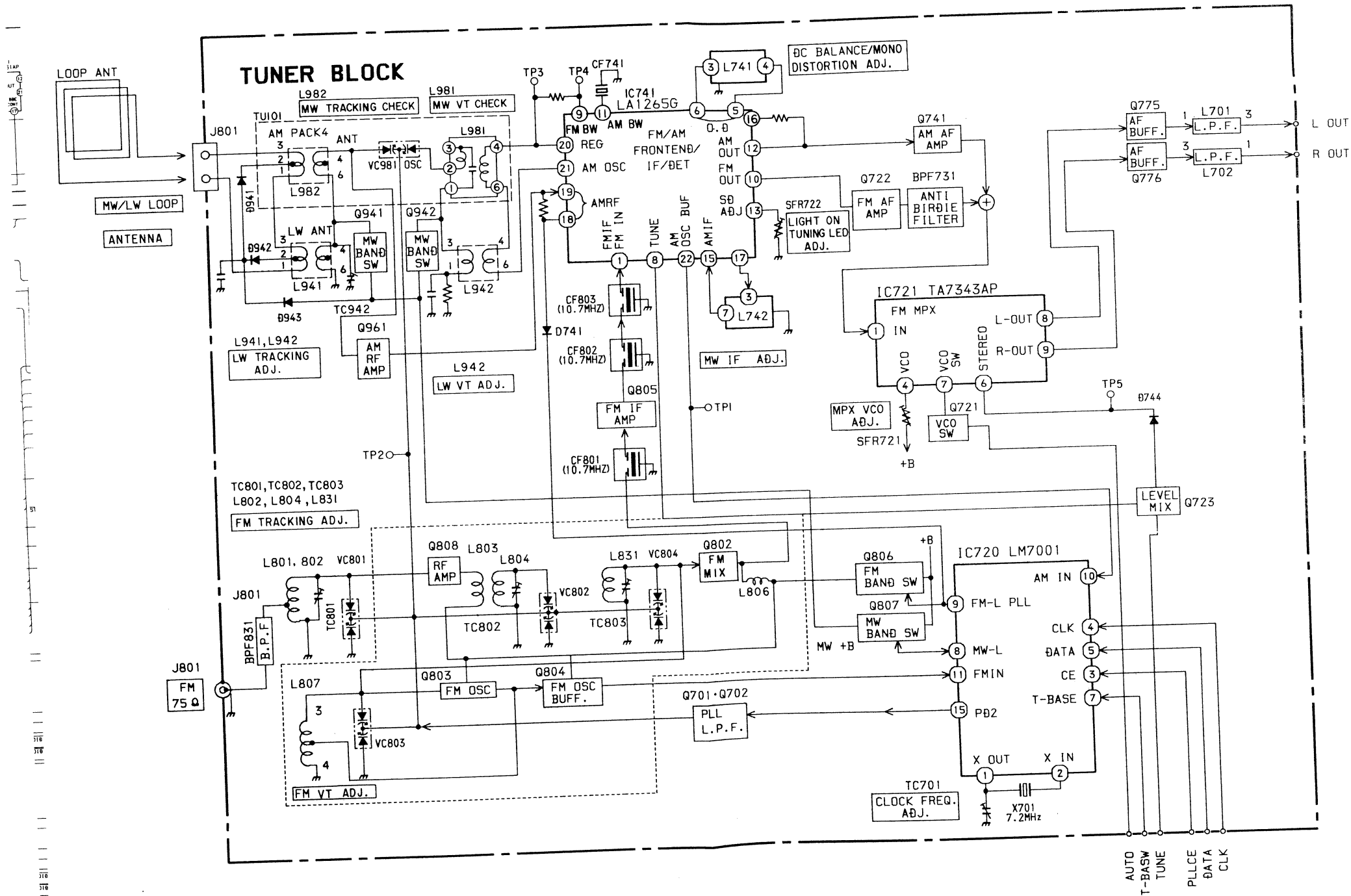
	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	B1	B1	B1	B1	B1	RECORD	2a	2a	a	a	a	a
P2	B2	B2	B2	B2	B2	ONR	2b	2b	b	b	b	b
P3	B3	B3	B3	B3	B3	C	2c	2c	c	c	c	c
P4	B4	B4	B4	B4	B4	)	2d	2d	d	d	d	d
P5	B5	B5	B5	B5	B5	>	2e	2e	e	e	e	e
P6	B6	B6	B6	B6	B6	<	2f	2f	f	f	f	f
P7	B7	B7	B7	B7	B7	/	2g	2g	g	g	g	g
P8	B8	B8	B8	B8	B8	TUNE	●	KHz	h	h	h	h
P9	B9	B9	B9	B9	B9	AUTO	1a	1a	j	j	j	j
P10	B10	B10	B10	B10	B10	((<<)))	1b	1b	k	k	k	k
P11	B11	B11	B11	B11	B11	⌚	1c	1c	m	m	m	m
P12	B12	B12	B12	B12	B12	REC	1d	1d	n	n	n	n
P13	B13	B13	B13	B13	B13	AM	1e	1e	r	r	r	r
P14	B14	B14	B14	B14	B14	PM	1f	1f	●	●	—	s
P15	B15	B15	B15	B15	B15	/	1g	1g	SLEEP	●	—	t
P16	B16	B16	B16	B16	B16	—	●	MHz	TIMER	—	—	u
P17	S1	S1	S1	S1	S1	—	—	—	—	—	—	—
P18	S2	S2	S2	S2	S2	—	—	—	—	—	—	—
P19	—	—	—	—	—	T	—	—	—	—	—	—
P20	—	—	—	—	T-BASS	—	—	—	—	—	—	—
P21	—	—	—	—	BEE	—	—	—	—	—	—	—
P22	—	—	—	—	—	—	—	—	p	p	p	p



UT
UT



BLOCK DIAGRAM - 4 (Z MODELS)



IC DESCRIPTION

IC, LC67216A - 4950

Pin No.	Pin Name	I/O	Description
1	AV+	I	A/D converter reference voltage (positive).
2	AV-	I	A/D converter reference voltage (negative).
3	I-HOLD	I	When the AC power is not supplied and the input is "L", the controller is held (clock stop and memory maintain).
4	I-SPEANA (A/D)	I	Analog input for the spectrum analyzer.
5	I-TUNE/ST (A/D)	I	Signal input while the tuner is receiving signals and the stereo system signal.
6	I/O-SERIAL	I/O	For communication with CD.
7	I-TM BASE	I	Time base input for clock (8 Hz).
8	O-MVR DOWN	O	} Motor VOL control.
9	O-MVR UP		
10	I-RMC	I	Remote control signal.
11	I-SW (A/D)	I	VOCAL FADER/DEMO/Mute DISP keys 1, 2 and 3 input.
12	VSS	-	GND
13	OSC 1	-	3.9 MHz oscillation circuit.
14	OSC 2	-	
15	VDD	-	Power supply.
16	RESET	I	Reset input.
17	X1	-	Sub clock terminal (Not used).
18	X2	-	
19	TEST	-	It is connected to GND.
20	O-STB (FRONT)	O	Shift register (4094) strobe signal (PWB and FRONT).
21	O-DATA	O	Serial data for the shift register PLL IC.
22	O-CLK	O	Serial data clock signal for the shift register PLL IC.
23	F-TAPE	O	For lighting TAPE LED.
24	F-TUNER	O	For lighting TUNER LED.
25	NC	-	
26	F-AUX	O	For lighting AUX LED.
27	F-CD	O	For lighting CD LED.
28	S4	O	FL display segment output.
39	S15		
40	-VP	I	40. FL display power (negative).
41	S16	O	FL display segment output.
44	S19		
45	T11	O	FL display digit output.
56	T0		
57	KEY 0	I	Key matrix data input.
60	KEY 3		

Pin No.	Pin Name	I/O	Description
61	O-PLLCE	O	PLL IC chip enable output for the tuner.
62	VOCAL FADER	O	For Vocal fader control.
63	O-STB (MAIN)	O	Shift register (4094) strobe signal (PWB and MAIN).
64	O-POWER	O	Power ON/OFF control.

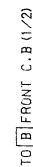
IC, LM7001

Pin No.	Pin Name	I/O	Description
1	X-OUT	-	Connected to the crystal logic oscillator.
2	X-IN		
3	CE	I	Signal is transmitted from the CPU (microcomputer) by operating the key. Active "H".
4	CLK		
5	DATA		
6	SYC	-	OPEN
7	T-BASE	O	8 Hz output terminal for the clock.
8	MW-L	O	"L" level is output when receiving MW.
9	FM-L	O	"L" level is output when receiving FM.
10	AM IN	I	AM station oscillation signal input terminal.
11	FM IN	I	FM station oscillation signal input terminal.
12	VDD1	-	Power terminal. 5.6 V
13	VDD2		
14	PD1	-	OPEN.
15	PD2	O	PLL charge pump output terminal.
16	VSS	-	GND terminal.

(プリント基板内のケミコンの極性表示は⊖表示です。)



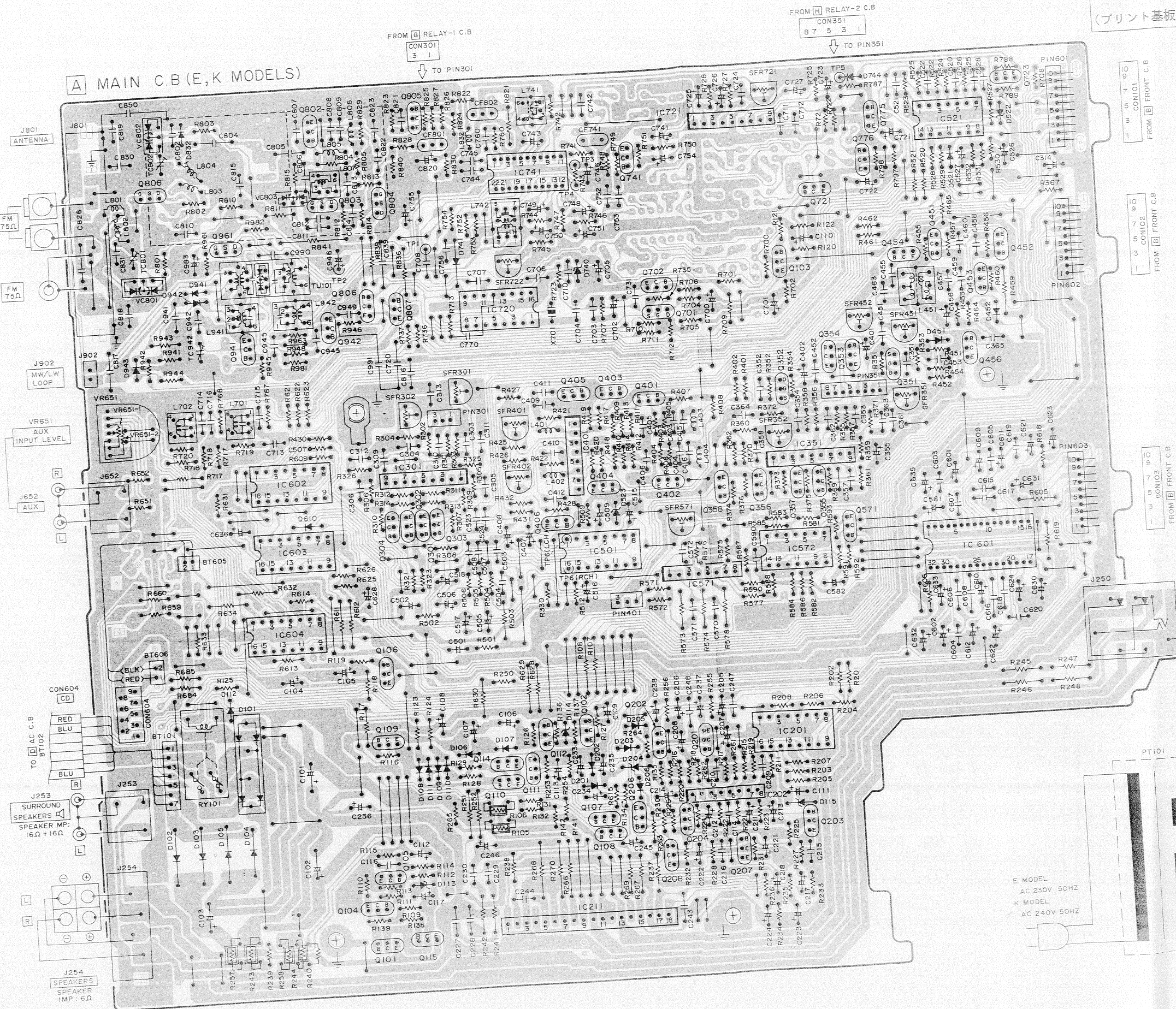
TO B FRONT C.B (1/2)



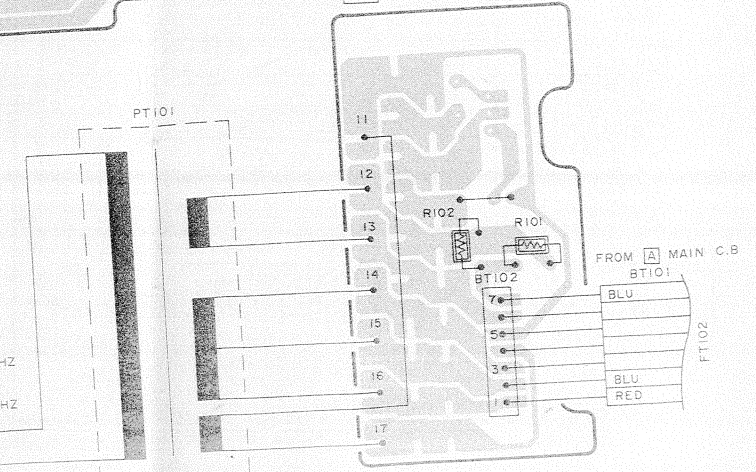
WIRING - 2 (E, K MODELS)

GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF
ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.
(プリント基板内のケミコンの極性表示は⊖表示です。)

A MAIN C.B (E, K MODELS)

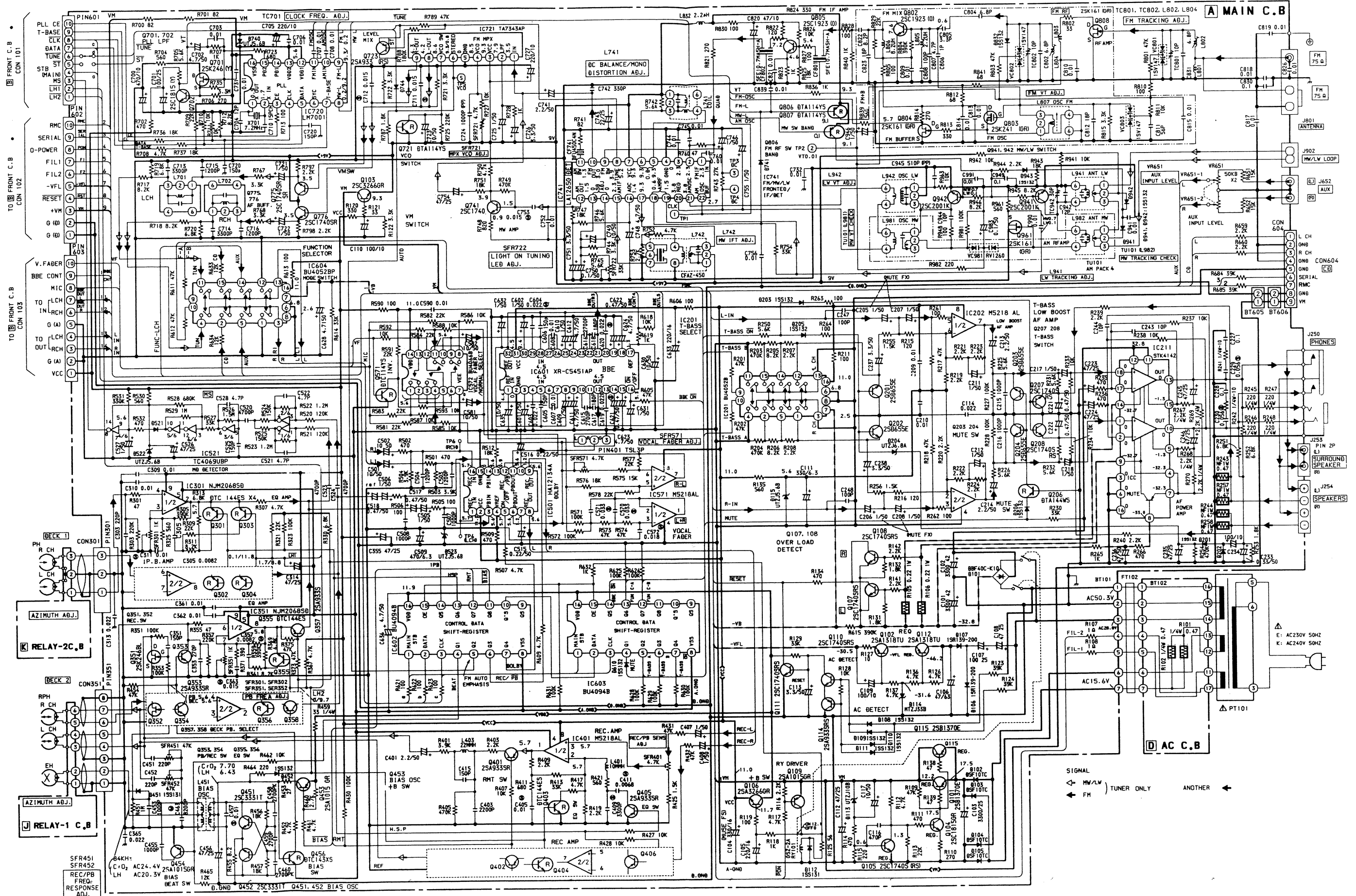


D AC C.B



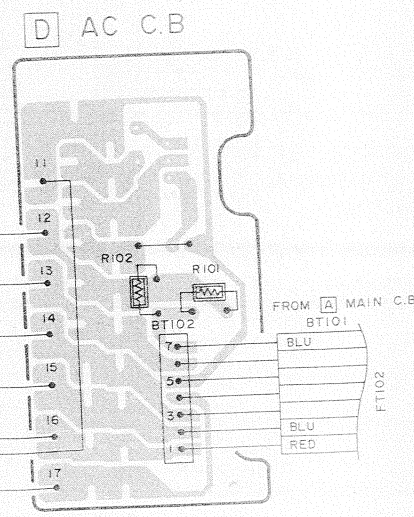
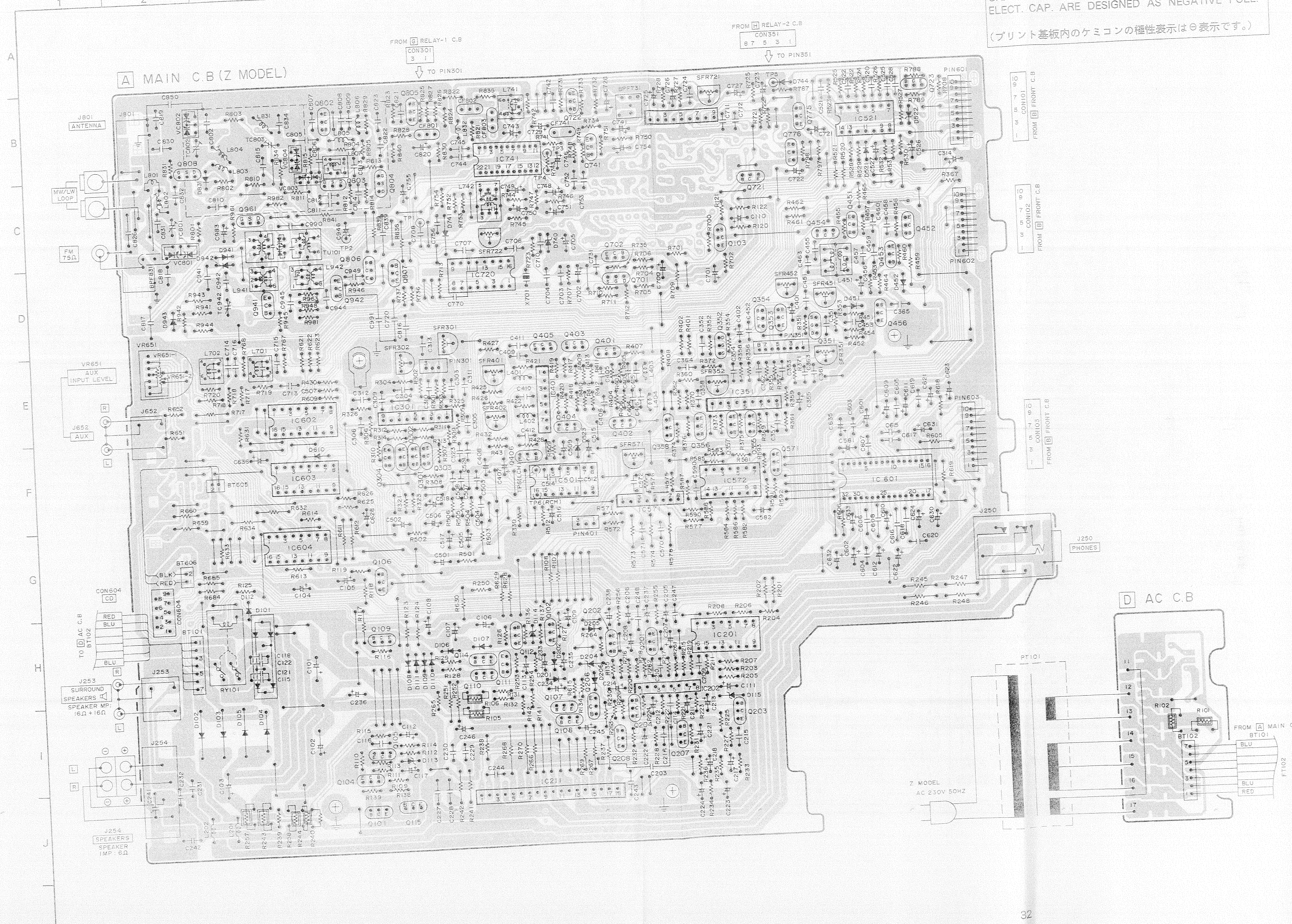
E MODEL
AC 230V 50HZ
K MODEL
AC 240V 50HZ

SCHEMATIC DIAGRAM - 2 (E, K MODELS)

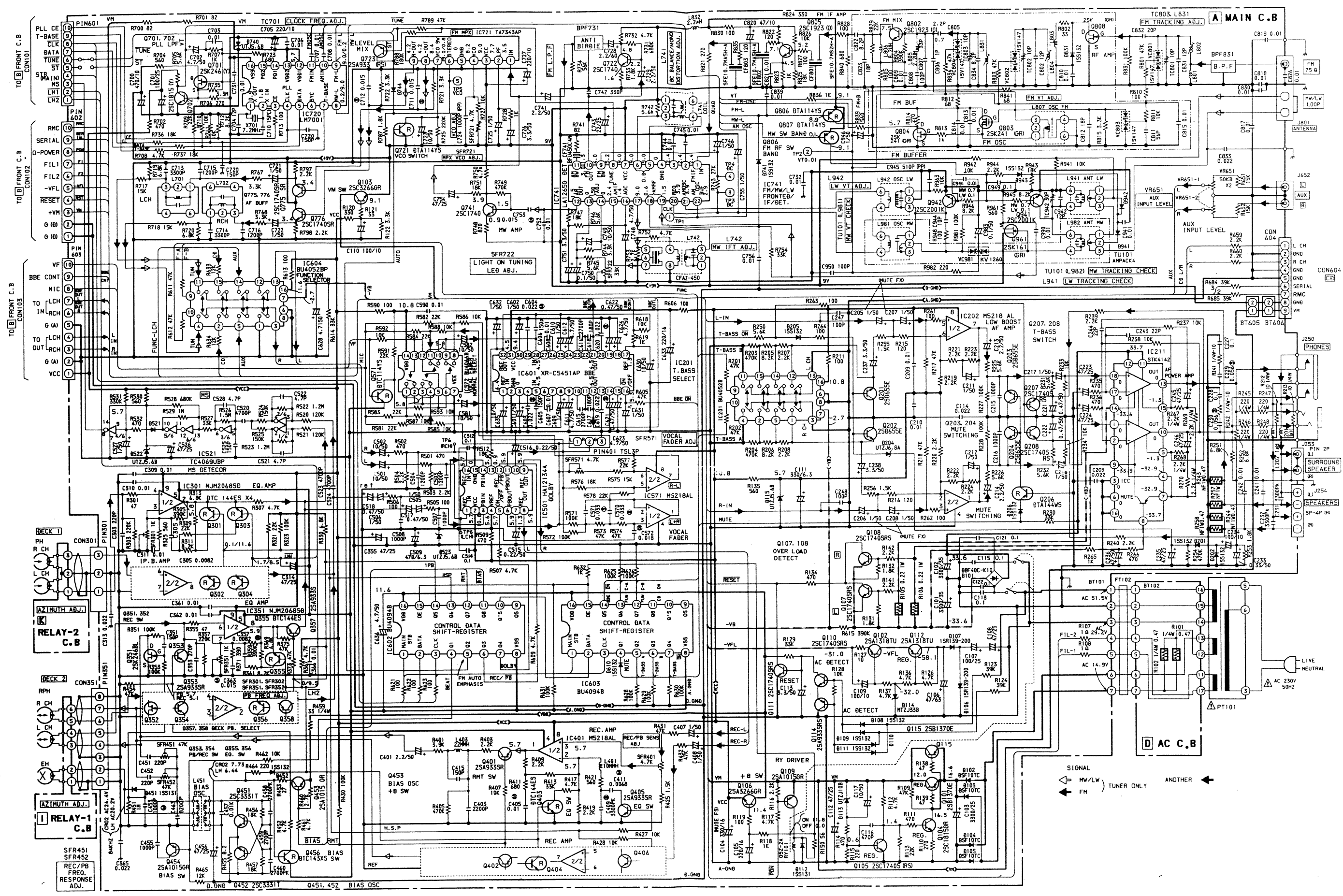


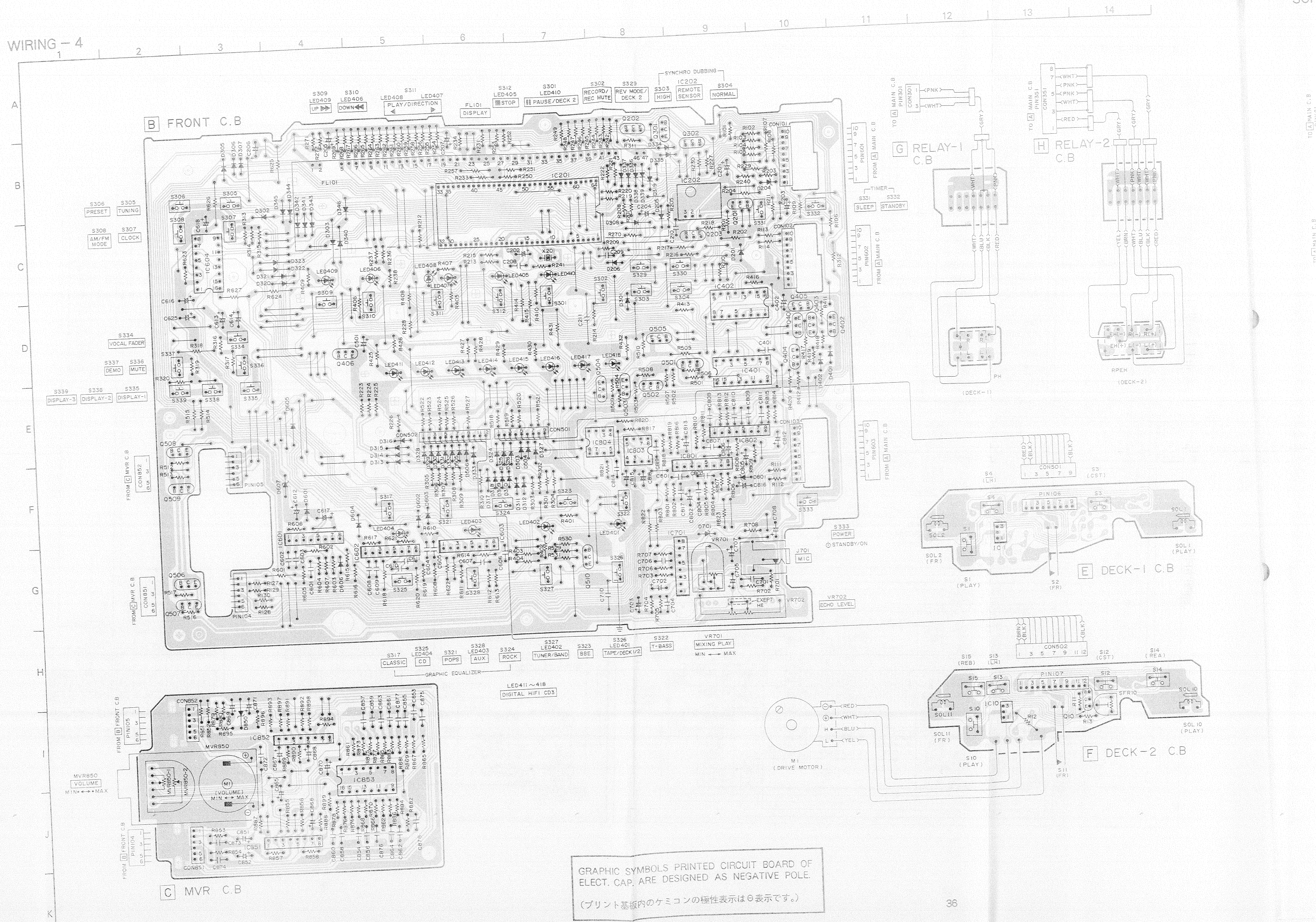
WIRING - 3 (Z MODELS)

GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF
ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.
(プリント基板内のケミコンの極性表示は⊖表示です。)

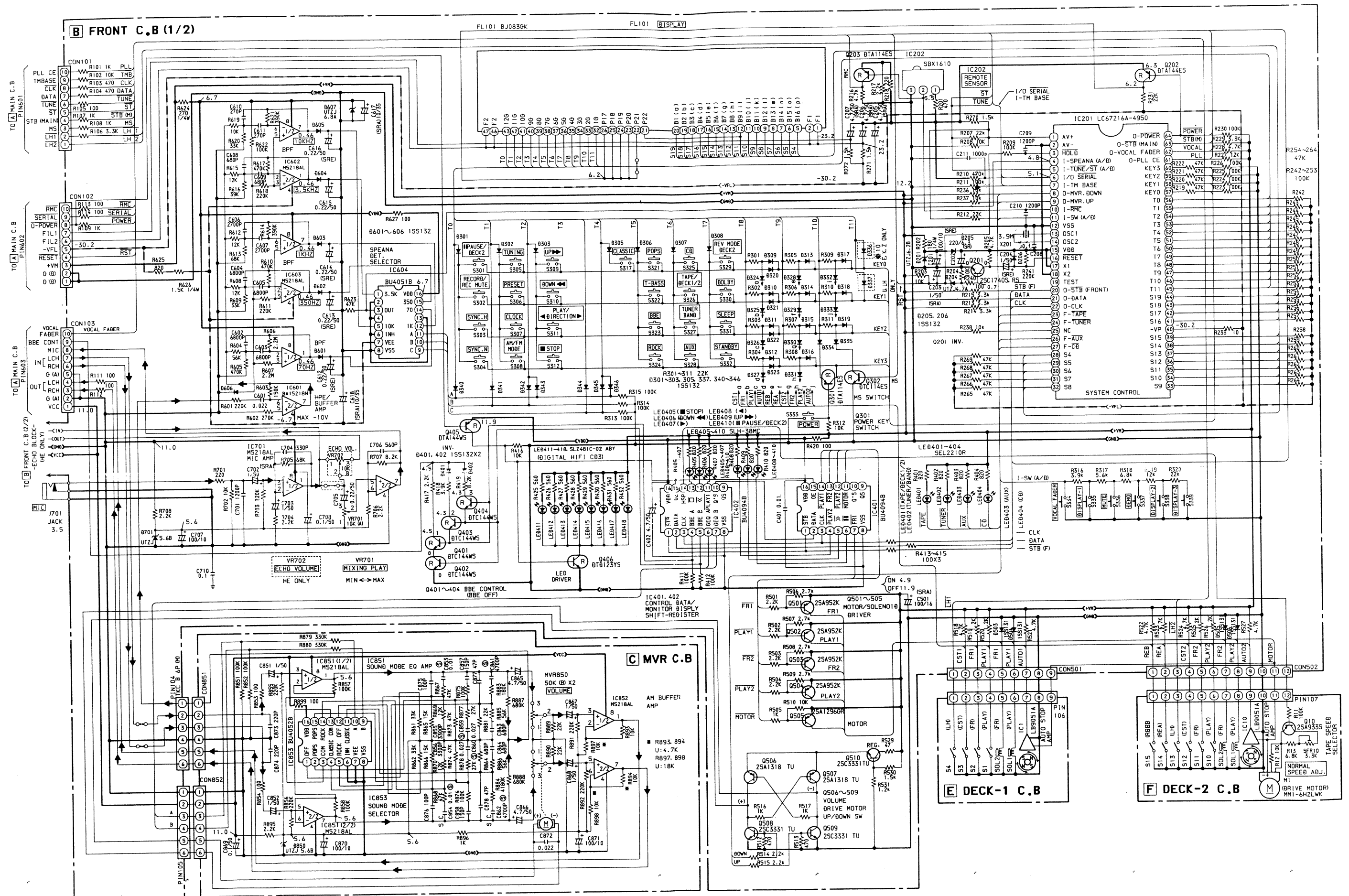


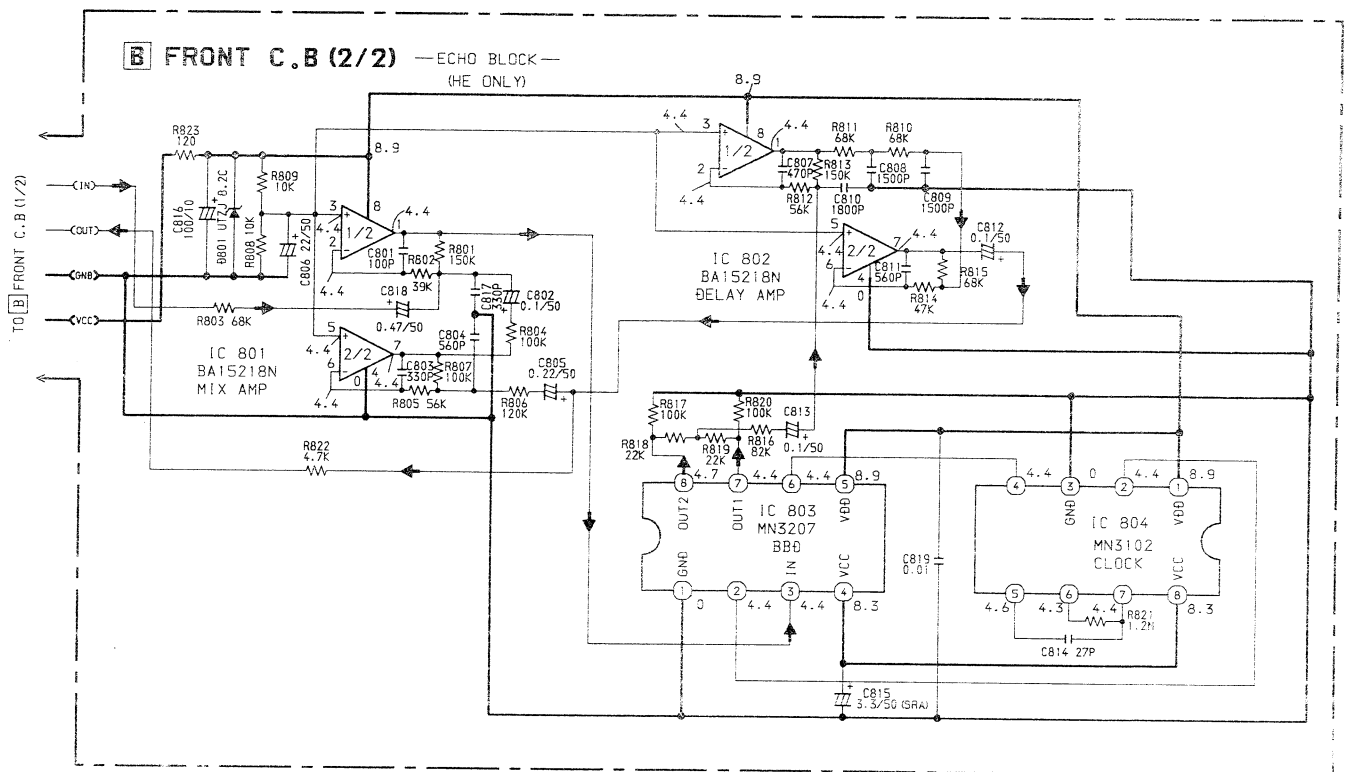
SCHEMATIC DIAGRAM - 3 (Z MODELS)

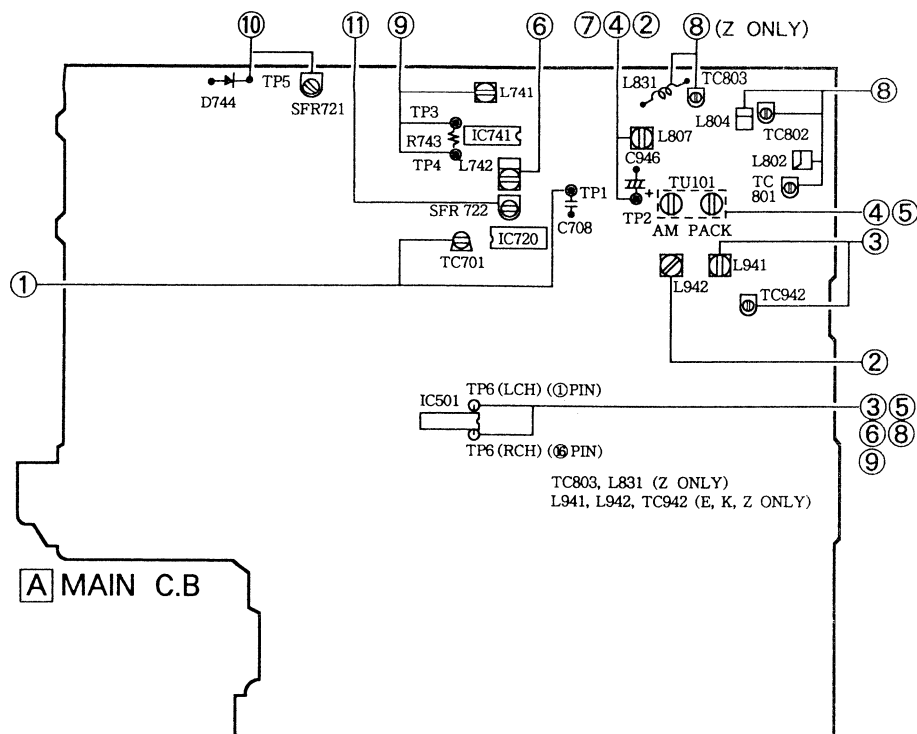




GRAPHIC SYMBOLS PRINTED CIRCUIT BOARD OF ELECT. CAP. ARE DESIGNED AS NEGATIVE POLE.
(プリント基板内のケミコンの極性表示は⊖表示です。)







(TUNER SECTION)

1. Clock Frequency Adjustment
Settings : • Test point : TP1 (CLK)
 • Adjustment location : TC701
Method : Set to AM 1602kHz (HE, E, K, Z), 1710kHz (LH, U) and adjust so that the test point becomes 2052kHz $\pm$ 0.01kHz (HE, E, K, Z), 2160kHz $\pm$ 0.01kHz (LH, U).
2. LW VT Adjustment (E, K, Z)
Settings : • Test point : TP2 (VT)
 • Adjustment location : L942
Method : Set to LW 144kHz and adjust so that the test point becomes 1.5V $\pm$ 0.05V.

3. LW Tracking Adjustment (E, K, Z)
Settings : • Test point : TP6 (IC501, PIN ①/PIN ⑤)
L941 144kHz
TC942 290kHz
4. MW VT Check
Settings : • Test point : TP2 (VT)
• Adjustment location : TU101
Method : Set to AM 1602kHz (HE, E, K, Z), 1710kHz (LH, U) and adjust so that the test point becomes $6.0V \pm 1.0V$ (HE, E, K, Z), $7.0 \pm 1.0V$ (LH, U).
5. MW Tracking Check
Settings : • Test point : TP6 (IC501, PIN ①/PIN ⑤)
Adjustment location : TU101
Method : Set to AM 999kHz (HE, E, K, Z), 1000kHz (LH, U) and adjust so that point become $53 \pm 6dB$ (HE, E, K, Z), S/N 20dB (LH, U).
6. AM IF Adjustment
Settings : • Test point : TP6 (IC501, PIN ①/PIN ⑤)
L742 450kHz

ADJUSTME

DECK

< TUNER SECTION >

< FM SECTION >

IHF Sensitivity : $2 \pm 6\text{dB}$ (Except Z)
 (THD 3%) (at 87.5, 98.0, 108.0MHz)
 $7 \pm 6\text{dB}$ (Z)
 (at 87.5, 98.0, 108.0MHz)

S/N 50dB Quieting Sensitivity :
(Except Z) 32 ± 5 dB
(at 87.5, 98.0, 108.0MHz)

S/N 46dB Quieting Sensitivity :
(Z) 37 ± 6 dB
(at 87.5, 98.0, 108.0MHz)

Signal to Noise Ratio : More than 64dB (Except Z)
(at 98.0MHz)
More than 60dB(Z)

	(at 60.0MHz)
Distortion :	Less than 1.2 %
	(at 98.0MHz)

Stereo Separation : More than 25dB (at 98.0MHz)
Intermediate Frequency : 10.7MHz

< AM (MW) SECTION >

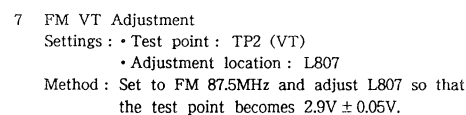
Sensitivity : S/N (20dB)	54 ± ½ dB (at 603kHz (HE, E, K, Z)) (at 600kHz (LH, U))
	53 ± 6dB (at 999/1404kHz (HE, E, K, Z)) (at 1000/1400kHz (LH, U))
Distortion :	Less than 1.5% (at 999kHz (HE, E, K, Z)) (at 1000kHz (LH, U))

Intermediate Frequency : 450kHz

< LW SECTION > (E, K, Z)

Sensitivity :	66 ± 5dB (at 144kHz)
(S/N 20dB)	63 ± 5dB (at 198Hz)
	62 ± 5dB (at 290kHz)

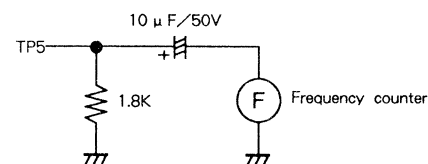
Signal to Noise Ratio :	More than 32dB (at 198kHz)
Distortion :	Less than 1.5 % (at 198kHz)
Intermediate Frequency :	450kHz



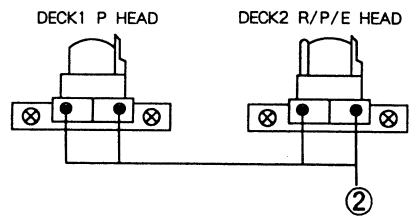
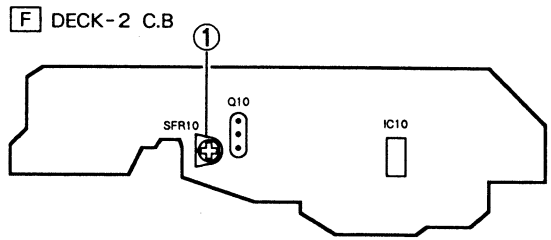
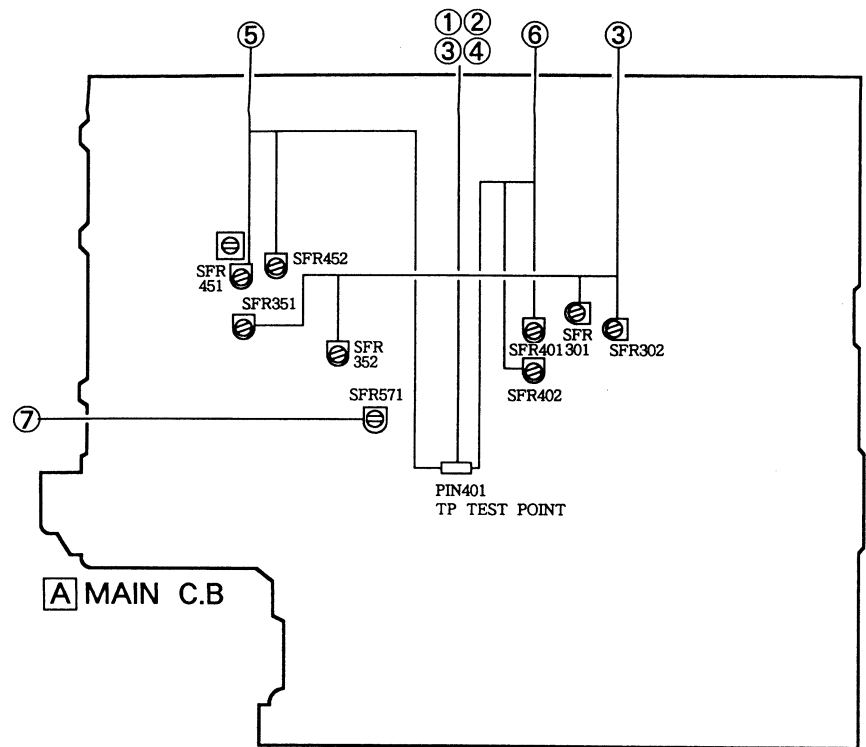
8. FM Tracking Adjustment
 Settings : • Test point : TP6 ((IC501, PIN①/PIN⑤)
 TC801, TC802 108MHz (Except Z)
 TC801, TC802, TC803 108MHz (Z)
 L802, L804 87.5MHz (Except Z)
 L802, L804, L831 87.5MHz (Z)

9. DC Balance/MONO Distortion Adjustment
Settings : • Test point : TP3, TP4 (DC balance)
TP6 ((IC501, PIN①/PIN⑥)
(Distortion)
• Adjustment location : L741
• Input level : 54dB
Method : Set to FM 98.0MHz and adjust L741 so that
TP3 and TP4 output becomes $0V \pm 0.02V$.
Next, adjust L741 so that the distortion
becomes minimum (less than 0.9%).

10. MPX VCO Adjustment
- Settings :
- Test point : TP5
 - MODE SW : STEREO
 - Adjustment location : SFR721
 - Input level : 54dB
- Method : Connect a capacitor and a resistor as below.
- Set to FM 98.0MHz and adjust so that the frequency at test point becomes $38\text{kHz} \pm 0.05\text{kHz}$.



11. Light on tuning LED Adjustment
 Settings : • Adjustment location : SFR722
 • Input level : 16dB
 Method : Set to FM 98.0MHz and adjust TUNING LED
 to light on by SFR722. After that, LED goes
 out by 16 ± 2dB down.



(DECK SECTION)

1. Normal Speed Adjustment (DECK-2)
Settings : • Test tape : TTA-100 (TTA-111S)
• Test point : TP-OUT (PIN401)
• Adjustment location : SFR10 (DECK-2)
Method : Play back the test tape, on FWD PLAY
SFR10 (DECK-2) adjust for $2990\text{Hz} \pm 5\text{Hz}$.
2. Head Azimuth Adjustment (DECK-1, DECK-2)
Settings : • Test tape : TTA-310 (TTA-317E, SCC-1429)
• Test point : TP-OUT (PIN401)
• Adjustment location : Head azimuth
adjustment screw
Method : Play back the 10kHz signal of the test tape
and adjust so that the output becomes
maximum. Next, perform on each FWD PLAY
and REV PLAY mode.
3. PB Sensitivity Adjustment (DECK-1, DECK-2)
Settings : • Test tape : TTA-200 (TCC-130, TTA-161)
• Test point : TP-OUT (PIN401)
• Adjustment location :
SFR301 (DECK-1, Lch)
SFR302 (DECK-1, Rch)
SFR351 (DECK-2, Lch)
SFR352 (DECK-2, Rch)
Method : Play back the test tape and adjust so that
the output becomes 300mV.
4. PB Frequency Response Check (DECK-1, DECK-2)
Settings : • Test tape : TTA-310 (TTA-317E, SCC-1429)
• Test point : TP-OUT (PIN401)
Method : Play back the 315Hz and 10kHz signals of the
test tape and check the output of the 10kHz
signal is $0\text{dB} \pm 2\text{dB}$ with respect to that of the
315Hz signal.
5. REC/PB Frequency Response Adjustment (DECK-2)
Settings : • Test tape : TTA-601
• Test point : TP-OUT (PIN401)
• Input signal : 1kHz/10kHz (VCR/AUX IN)
• Adjustment location : SFR451 (Lch)
SFR452 (Rch)
Method : Apply a 1kHz signal and adjust attenuator so
that the level at the TP-OUT is 210mV.
Record and play back the 1kHz and 10kHz
signals and adjust so that the output level of
10kHz signal is $0\text{dB} \pm 0.5\text{dB}$ for 1kHz signal.
6. REC/PB Sensitivity Adjustment (DECK-2)
Settings : • Test tape : TTA-601
• Test point : TP-OUT (PIN401)
• Input signal : 1kHz (VCR/AUX IN)
• Adjustment location : SFR401 (Lch)
SFR402 (Rch)
Method : Apply a 1kHz signal and adjust attenuator so
that the level at the TP-OUT is 21mV.
Record and play back the 1kHz signal and
10kHz signals and adjust so that the output
level is $21\text{mV} \pm 0.5\text{dB}$.

7. Vocal Fader Adjustment

- Settings : • Test point : SP OUT
: SFR571
• Adjustment location : SFR571
Method : Add a 2kHz, -16.5dB signal from
AUX. Adjust SFR571 so that the
voltage at test point becomes
minimum.

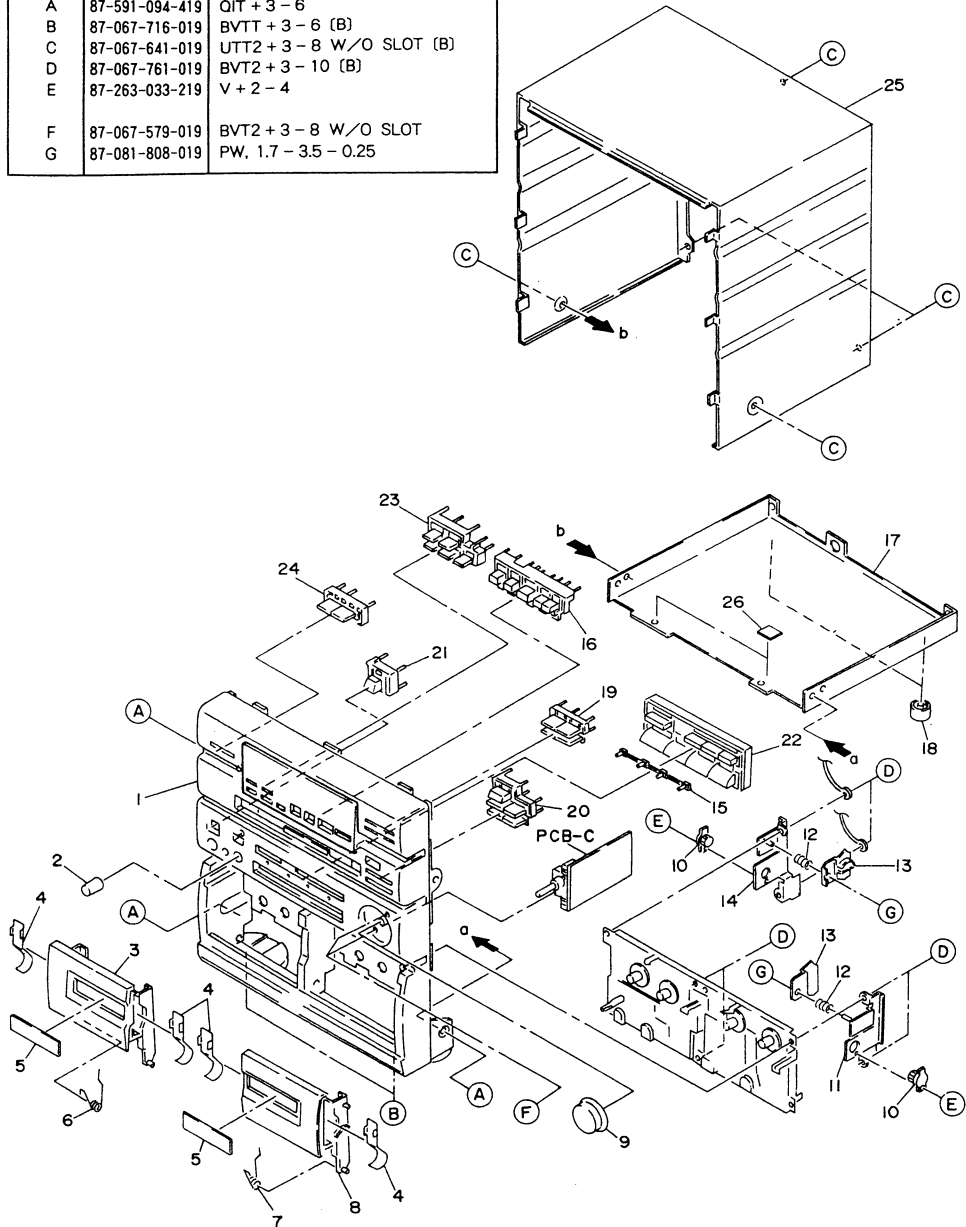
PRACTICAL SERVICE FIGURE

<DECK SECTION>

PB Output Level :	$2.9\text{V} \pm 1.5\text{dB}$ (SP OUT) TTA-200 (TTA-161, TCC-130) $2.0\text{V} \pm 2\text{dB}$ (SP OUT) TTA-601.
REC/PB Output Level :	$2.0\text{V} \pm 2\text{dB}$ (SP OUT) TTA-601.
Distortion (REC/PB) :	Less than 2.0% (NORM, CrO ₂)
Noise (PB) :	Less than 130mV/200mV (DOLBY NR ON/OFF NORM, VR MAX.) Less than 100mV/150mV (DOLBY NR ON/OFF CrO ₂ , VR MAX.)
Erasing Ratio :	More than 60dB (TTA-601) (at 125Hz)
Channel Separation :	More than 50dB
Recording Bias Frequency :	85kHz
Wow & Flutter :	Less than 0.25% (DECK-1/2) TTA-100 (TTA-111S) $3\text{kHz} \pm 1.5\%$
Tape Speed :	$3\text{kHz} \pm 1.5\%$
Take-up Torque :	NORM : 25~60g-cm (DECK-1/2)
F.F & REW Torque :	70~150g-cm (DECK-1/2)
Back Tension :	2~6g-cm (DECK-1/2)
Test Tape :	NORMAL : TTA-601 CrO ₂ : TTA-610 (TTA-119H) METAL : TTA-630

EXPLODED VIEW - 1

REF. NO.	PART NO.	DESCRIPTION
A	87-591-094-419	QIT + 3 - 6
B	87-067-716-019	BVTT + 3 - 6 (B)
C	87-067-641-019	UTT2 + 3 - 8 W/O SLOT (B)
D	87-067-761-019	BVT2 + 3 - 10 (B)
E	87-263-033-219	V + 2 - 4
F	87-067-579-019	BVT2 + 3 - 8 W/O SLOT
G	87-081-808-019	PW, 1.7 - 3.5 - 0.25

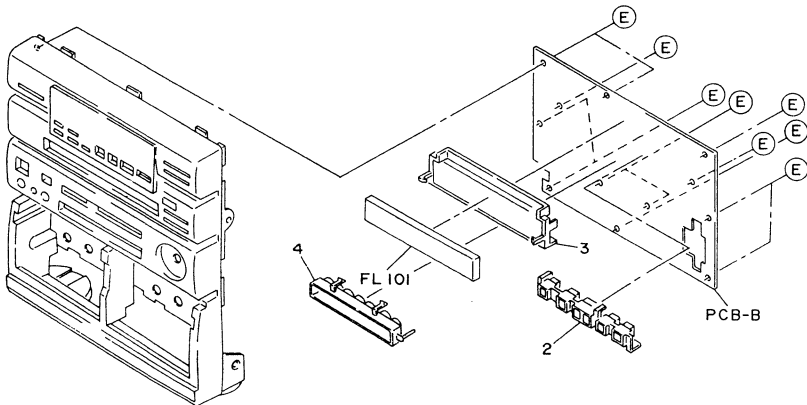
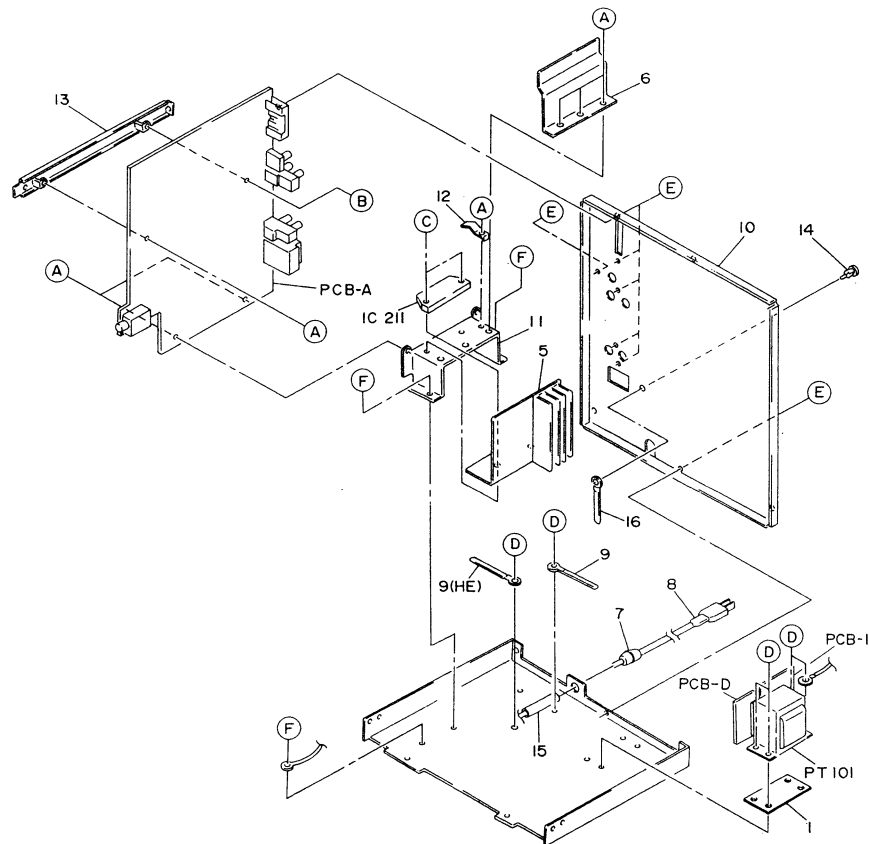


MECHANICAL PARTS LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	1-1	★09-047-712-010	FRONT CABINET ASSY [B] (HE)	※	1
	1-1	★09-047-713-010	FRONT CABINET ASSY [B] (LH)	※	1
	1-1	★09-047-714-010	FRONT CABINET ASSY [B] (U)	※	1
	1-1	★09-047-715-010	FRONT CABINET ASSY [B] (E, K, Z)	※	1
	1-1	★09-047-725-010	FRONT CABINET ASSY [N]	※	1
	1-1	★09-047-724-010	FRONT CABINET ASSY [W]	※	1
	1-2	★81-MX4-019-019	KNOB, MIC [B]		1
	1-2	★81-MX4-071-019	KNOB, MIC [N]		1
	1-2	★81-MX4-124-019	KNOB, MIC [W]		1
	1-3	★81-MX4-047-019	BOX, CASSETTE 1 [B]		1
	1-3	★81-MX4-090-019	BOX, CASSETTE 1 [N]		1
	1-3	★81-MX4-113-019	BOX, CASSETTE 1 [W]		2
	1-4	★81-MX4-223-019	P - SPRING, CASSETTE		4
	1-5	★81-MX4-014-019	WINDOW, BOX 1		2
	1-6	★81-MX4-213-019	T - SPRING, EJECT 1		1
	1-7	★81-MX4-214-019	T - SPRING, EJECT 2		1
	1-8	★81-MX4-048-019	BOX, CASSETTE 2 [B]		1
	1-8	★81-MX4-091-019	BOX, CASSETTE 2 [N]		1
	1-8	★81-MX4-114-019	BOX, CASSETTE 2 [W]		1
	1-9	★81-MX4-030-019	VOLUME KNOB ASSY [B]		1
	1-9	★81-MX4-093-019	VOLUME KNOB ASSY [N]		1
	1-9	★81-MX4-121-019	VOLUME KNOB ASSY [W]		1
	1-10	★87-063-151-010	DAMPER, OIL 37		2
	1-11	★80-MW3-204-019	LOCK HOLDER ASSY 2		1
	1-12	★80-MW3-218-019	C - SPRING, LOCK		2
	1-13	★80-CD3-233-010	PLATE, LOCK		2
	1-14	★80-MW3-201-019	LOCK HOLDER ASSY 1		1
	1-15	★81-MX4-020-019	INDICATION, FUNCTION		1
	1-16	★81-MX4-010-010	KEY, PLAY		1
	1-17	---	CHASSIS, MAIN		1
	1-18	★87-085-221-010	FOOT		2
	1-19	★81-MX4-005-019	KEY, TUNER [B]		1
	1-19	★81-MX4-061-019	KEY, TUNER [N]		1
	1-19	★81-MX4-115-019	KEY, TUNER [W]		1
	1-20	★81-MX4-006-019	KEY, CD [B]		1
	1-20	★81-MX4-062-019	KEY, CD [N]		1
	1-20	★81-MX4-116-019	KEY, CD [W]		1
	1-21	★81-MX4-007-019	KEY, POWER [B]		1
	1-21	★81-MX4-063-019	KEY, POWER [N]		1
	1-21	★81-MX4-117-019	KEY, POWER [W]		1
	1-22	★81-MX4-051-019	KEY, FUNCTION [B]		1
	1-22	★81-MX4-092-019	KEY, FUNCTION [N]		1
	1-22	★81-MX4-118-019	KEY, FUNCTION [W]		1
	1-23	★81-MX4-011-019	KEY, DUBBING		1
	1-24	★81-MX4-009-019	KEY, SLEEP [B]		1
	1-24	★81-MX4-065-019	KEY, SLEEP [N]		1
	1-24	★81-MX4-119-019	KEY, SLEEP [W]		1
	1-25	★82-NK4-025-019	CABINET, STEEL [B]	※	1
	1-25	★82-NK4-034-019	CABINET, STEEL [N]	※	1
	1-25	★82-NK4-031-019	CABINET, STEEL [W]	※	1
	1-26	★81-MX4-220-019	SHEET, 27.5 - 20 - 0.1		2

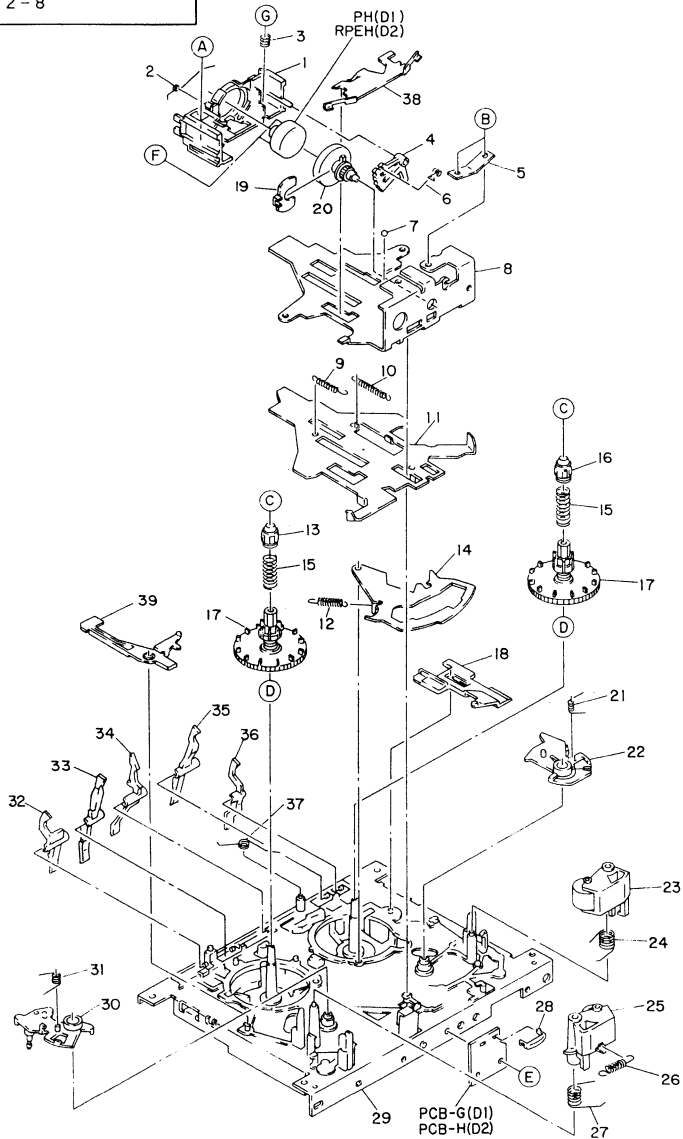
EXPLODED VIEW - 2

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
A	87-067-579-019	BVT2 + 3 - 8 W/O SLOT	C	87-067-581-019	BVT2 + 3 - 15 W/O SLOT	E	87-067-761-019	BVT2 + 3 - 10 [B]
B	87-067-633-019	BVT2 + 3 - 8 W CONVEX	D	87-067-585-019	BVTT + 4 - 6	F	87-067-584-019	BVT2 + 3 - 6 W/O SLOT



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	2-1	★81-MX4-657-018	HOLDER, CD 1 [B] (E, K, Z)		1
	2-2	★81-MX4-210-019	GUIDE, PLAY		1
	2-3	★81-DS2-204-019	GUIDE, FL		1
	2-4	★82-NK4-201-019	GUIDE, LED	※	1
	2-5	---	HEAT SINK ASSY [B] (K)		1
	2-6	---	HEAT SINK SUB [B, N, W] (U, E, Z)		1
	2-7	★87-085-185-010	BUSHING, AC CORD [B] (HE, E, K, Z)		1
	2-7	★87-085-184-010	BUSHING, AC CORD [B] (LH)		1
	2-7	★87-085-189-010	BUSHING, AC CORD [B, N, W] (U)		1
	2-8	★82-187-797-019	CORD, AC [B] (HE)		1
	2-8	★87-034-749-019	CORD, AC [B] (LH)		1
	2-8	★87-034-584-019	CORD, AC [B, N, W] (U)		1
	2-8	★87-050-016-018	CORD, AC [B] (E, Z)		1
	2-8	★87-034-592-018	CORD, AC [B] (K)		1
	2-9	---	BINDER, WIRE		2 [B] (HE)
					1 [B, N, W]
					(LH, U, E, K, Z)
	2-10	★82-NK4-026-019	PANEL, REAR [B] (HE)	※	1
	2-10	★82-NK4-010-019	PANEL, REAR [B] (HEJ)	※	1
	2-10	★82-NK4-011-019	PANEL, REAR [B] (LH)	※	1
	2-10	★82-NK4-012-019	PANEL, REAR [B] (U)	※	1
	2-10	★82-NK4-013-019	PANEL, REAR [B] (E)	※	1
	2-10	★82-NK4-014-019	PANEL, REAR [B] (K)	※	1
	2-10	★82-NK4-015-019	PANEL, REAR [B] (Z)	※	1
	2-10	★82-NK4-035-019	PANEL, REAR [N]	※	1
	2-10	★82-NK4-029-019	PANEL, REAR [W]	※	1
	2-11	---	HEAT SINK		1
	2-12	---	HOLDER, IC		1
	2-13	---	HOLDER, P. C. B		1
	2-14	★87-084-077-019	RIVET, NYLON DIA 3.5 - 4.5 [B] (E, K, Z)		1
	2-15	---	TUBE, UL [B] (LH)		1
	2-16	---	BINDER, WIRE [B] (E, K, Z)		1

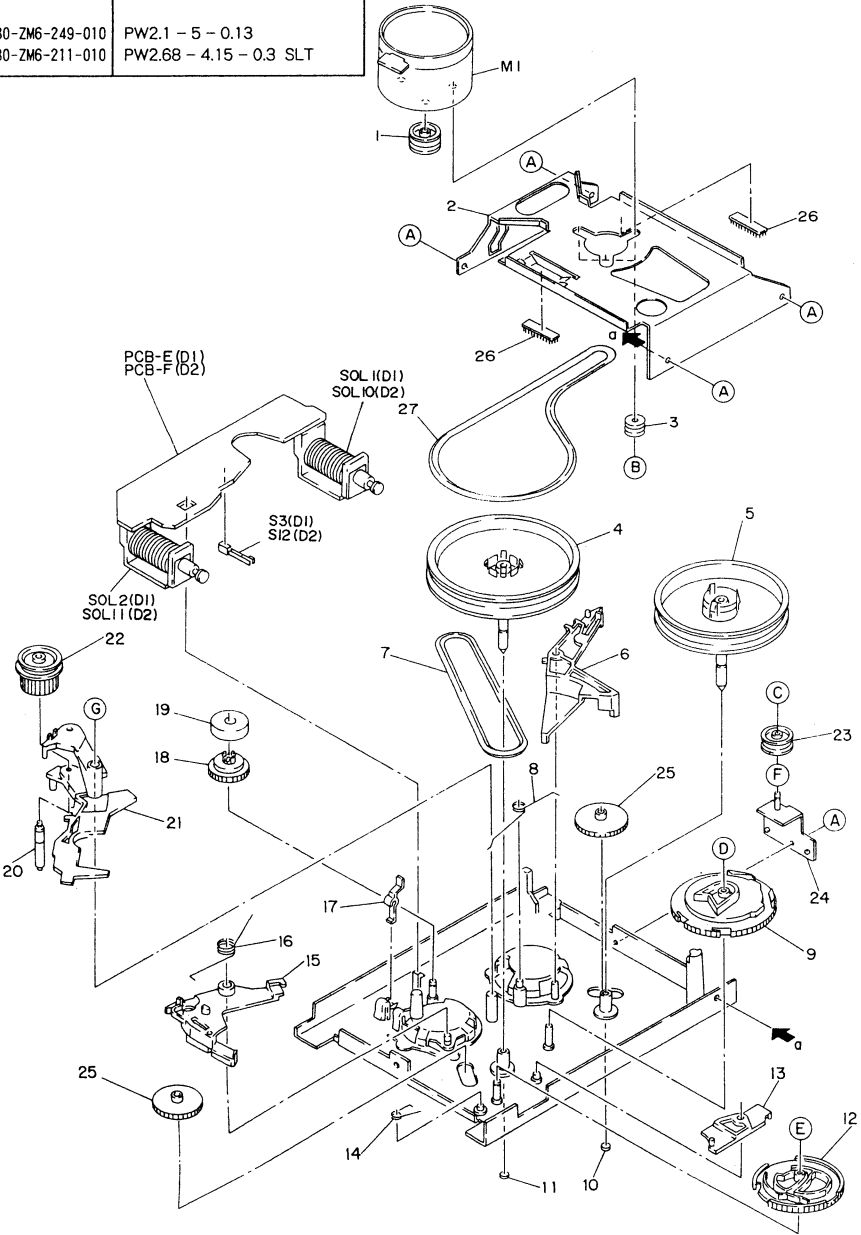
PART NO.	DESCRIPTION
87-263-033-110	V + 2 - 4
80-ZM6-251-010	SCREW S AZIMUTH 2
86-524-418-010	VFT2 + 1.4 - 5
87-067-825-010	PW4.1 - 6.9 - 0.25
87-067-174-010	VTT + 2 - 4
80-ZM6-207-010	V + 1.6 - 7
87-251-036-210	U + 2 - 8



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	3-1	★86-575-288-510	GUIDE, TAPE		1
	3-2	★86-575-310-210	T - SPRING, HEAD		1
	3-3	★86-541-318-119	C - SPRING, AZIMUTH		1
	3-4	★86-575-290-310	GEAR, SEGMENT		1
	3-5	★86-575-343-110	P - SPRING, AZIMUTH 2		1
	3-6	★80-ZM6-229-110	T - SPRING, GEAR SEG 2		1
	3-7	★87-073-018-019	BALL, STEEL 1.588		1
	3-8	★86-575-311-410	CHASSIS, HEAD		1
	3-9	★80-ZM6-268-019	E - SPRING, SLIDE 3		1
	3-10	★86-575-226-019	E - SPRING, CHASSIS HEAD		1
	3-11	★86-535-215-310	SLIDE PLATE ASSY		1
	3-12	★86-535-284-110	E - SPRING, DIRECTION LEVER		1
	3-13	★86-524-218-219	STOPPER, REEL TABLE S		1
	3-14	★86-535-218-310	LEVER, DIRECTION ASSY		1
	3-15	★86-535-293-019	C - SPRING, REEL TABLE		2
	3-16	★86-524-233-219	STOPPER, REEL TABLE T		1
	3-17	★80-ZM6-254-110	REEL GEAR ASSY L		2
	3-18	★86-575-345-210	LEVER, SWITCH 2		1
	3-19	★86-575-305-010	PLATE, HOUSING		1
	3-20	★86-575-306-910	HOLDER, HOUSING		1
	3-21	★86-535-282-019	T - SPRING, PLAY GEAR F		1
	3-22	★86-535-238-310	LEVER, PLAY F		1
	3-23	86-535-226-310	PINCH LEVER ASSY F		1
	3-24	★86-575-222-110	T - SPRING, PINCH F		1
	3-25	86-535-228-410	PINCH LEVER ASSY R		1
	3-26	★86-575-339-019	E - SPRING, PINCH 22		1
	3-27	★86-575-341-110	T - SPRING, PINCH L		1
	3-28	---	HOLDER, WIRE 2		1
	3-29	★80-ZM6-201-810	MECHANISM CHASSIS ASSY		1
	3-30	★86-535-239-110	LEVER, PLAY R		1
	3-31	★86-535-283-019	T - SPRING, PLAY GEAR R		1
	3-32	★86-575-322-110	LEVER, REC A (D2)		1
	3-33	★86-575-325-210	LEVER, METAL (D2)		1
	3-34	★86-575-324-310	LEVER, CASSETTE		1
	3-35	★86-575-327-210	LEVER, CROM		1
	3-36	★86-575-323-010	LEVER, REC B (D2)		1
	3-37	★80-ZM6-206-019	T - SPRING, CASSETTE		1
	3-38	★86-575-347-110	P - SPRING, HEAD 2		1
	3-39	★86-535-242-210	LEVER, EJECT SAFETY		1

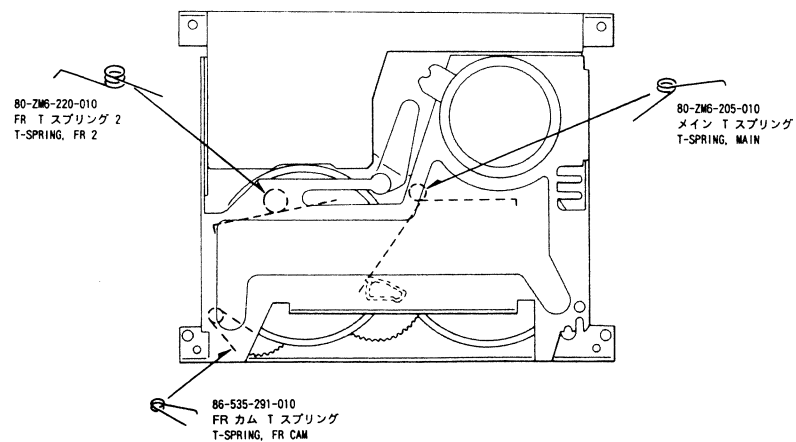
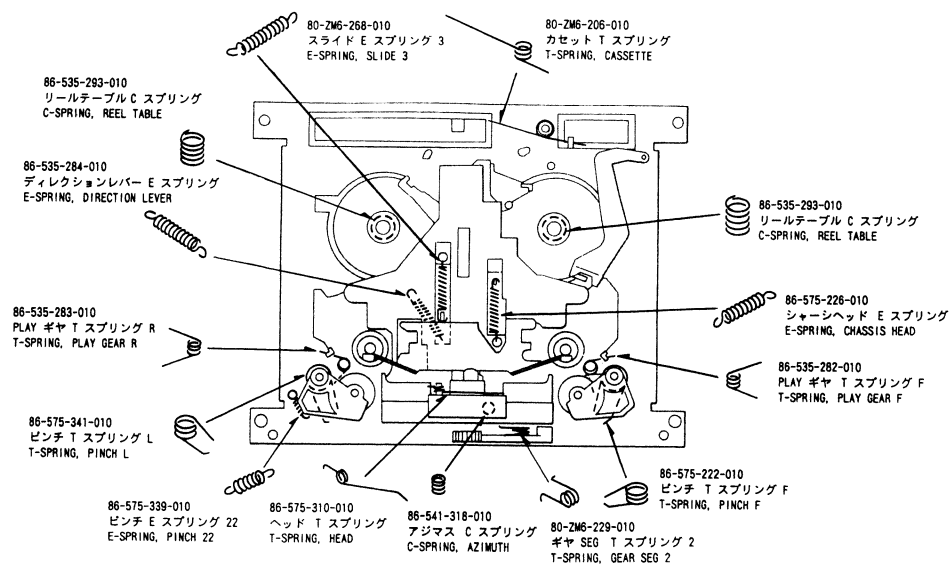
EXPLODED VIEW - 4

REF. NO.	PART NO.	DESCRIPTION
A	87-067-178-010	VTT + 2.6 - 3
B	86-524-457-010	U + 2.6 - 5.5
C	80-ZM6-216-010	PW1.57 - 4 - 0.25 SLT
D	87-081-489-010	PW1.7 - 3.5 - 0.25 SLT
E	87-067-380-010	PW1.7 - 7 - 0.5
F	80-ZM6-249-010	PW2.1 - 5 - 0.13
G	80-ZM6-211-010	PW2.68 - 4.15 - 0.3 SLT

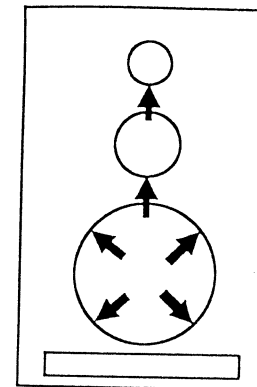


PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	4-1	★80-ZM6-228-510	PULLEY, MOTOR 2		1
	4-2	★81-ZM7-201-110	HOLDER, MOTOR 3	※	1
	4-3	★86-513-441-210	COLLAR, MOTOR		2
	4-4	★80-ZM6-203-210	FLYWHEEL ASSY R1 (D1)		1
	4-4	★80-ZM6-262-010	FLYWHEEL ASSY R2 (D2)		1
	4-5	★80-ZM6-208-310	FLYWHEEL ASSY L1 (D2)		1
	4-5	★80-ZM6-257-010	FLYWHEEL ASSY L2 (D1)		1
	4-6	★86-535-231-510	LEVER, TRIGGER PLAY		1
	4-7	80-ZM6-227-110	BELT, SQ 1.2 - 140		1
	4-8	★80-ZM6-205-110	T - SPRING, MAIN		1
	4-9	★86-575-312-110	CAM, MAIN		1
	4-10	★80-ZM6-243-019	SHEET 1.75 - 3.6 - 0.5 SLT		1
	4-11	★80-ZM6-242-019	SHEET 1.95 - 3.6 - 0.5 SLT		1
	4-12	★80-ZM6-219-210	CAM, FR MK 2 2M		1
	4-13	★86-575-229-210	LEVER, PAUSE B		1
	4-14	★86-535-291-210	T - SPRING, FR CAM		1
	4-15	★86-535-230-510	LEVER, TRIGGER FR		1
	4-16	★80-ZM6-220-019	T - SPRING, FR 2		1
	4-17	★86-575-326-210	LEVER, LINK		1
	4-18	★86-575-328-110	GEAR, IDLER		1
	4-19	★80-ZM6-217-010	MAGNET, RING 2		1
	4-20	★80-ZM6-222-110	SHAFT, FR PULLEY		1
	4-21	★80-ZM6-218-110	LEVER, FR 2		1
	4-22	★80-ZM6-221-110	GEAR, FR 2		1
	4-23	★80-ZM6-224-410	PULLEY, COUPLER		1
	4-24	★80-ZM6-213-110	HOLDER ASSY P (D1)		1
	4-25	★86-575-221-310	GEAR, PLAY		2
	4-26	★80-ZM6-230-019	SHEET, BELT		2
	4-27	★81-ZM7-202-110	BELT, SQ 1.3 - 262 (D2)	※	1
	4-27	★81-ZM7-203-110	BELT, SQ 1.3 - 274 (D1)	※	1

SPRING APPLICATION POSITION



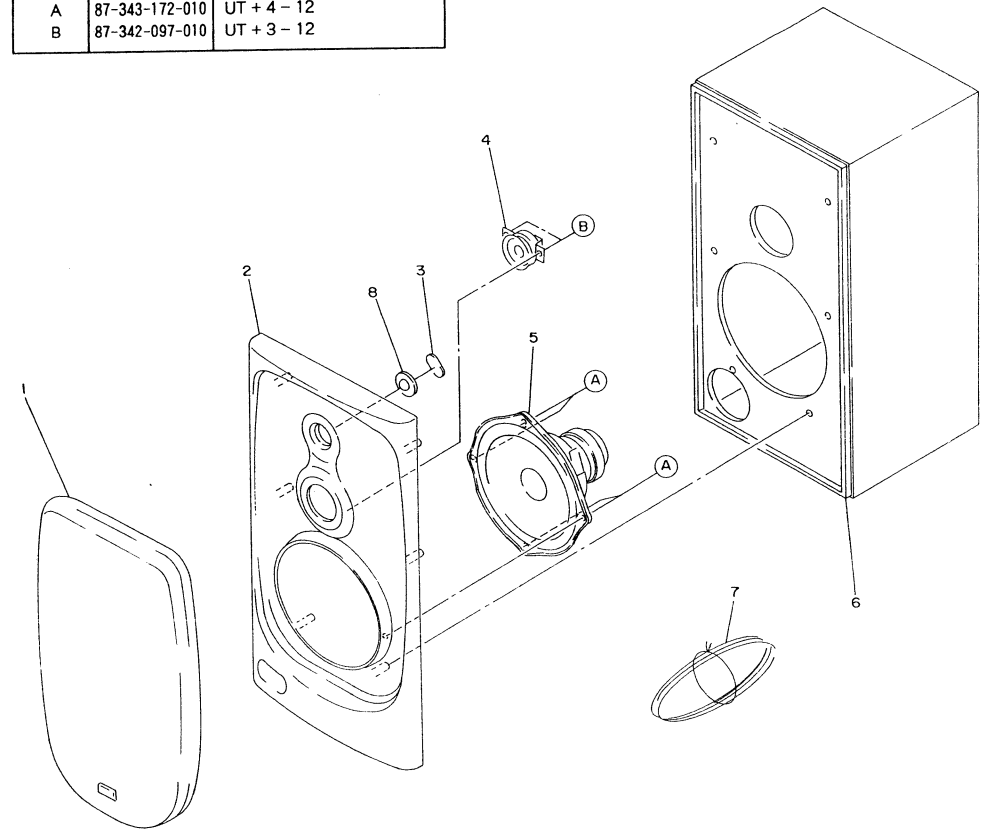
DISASSEMBLY INSTRUCTIONS (SX - N350M, SX - N351M, SX - 352M)



- Insert a flat-bladed screwdriver into the positions indicated by the arrows (shown in the above figure) and remove the grill assemblies of the woofer, mid-range speaker and tweeter. Remove the screws of each speaker unit and then remove the speaker units.

EXPLODED VIEW (SX - N350M, SX - N351M, SX - N352M)

REF. NO.	PART NO.	DESCRIPTION
A	87-343-172-010	UT + 4 - 12
B	87-342-097-010	UT + 3 - 12



■ SPEAKER LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	1	★82-NS4-006-010	GRILL FRAME ASSY		2
	2	★82-NS4-004-010	PANEL, FRONT L (B) (N350M)		1
	2	★82-NS4-005-010	PANEL, FRONT R (B) (N350M)		1
	2	★82-NS4-011-010	PANEL, FRONT L (N) (N352M)		1
	2	★82-NS4-012-010	PANEL, FRONT R (N) (N352M)		1
	2	★82-NS4-013-010	PANEL, FRONT L (W) (N351M)		1
	2	★82-NS4-014-010	PANEL, FRONT R (W) (N351M)		1
	3	81-MSE-610-010	CERAMIC		2
	4	81-MSE-604-010	SPEAKER, TWEETER		2
	5	81-MSE-602-010	SPEAKER, WOOFER		2
	6	- - -	CABINET ASSY		2
	7	★83-096-614-010	CORD, SPEAKER		2
	8	★81-MSD-011-010	CAP		2